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Patterns of Primary Education

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Patterns of Primary Education



Exploration Series in Education

*Under the Advisory Editorship
of
John Guy Fowlkes*

Patterns of Primary Education

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University of Wisconsin



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Editor's Introduction

This is an interesting, stimulating, and highly useable work. The very title of this volume, *Patterns of Primary Education*, is refreshing. Immediately the author alerts the reader to the important fact that there is no single pattern, method, procedure, or device which will serve as a sound basis for the education of young children.

Discriminating attention has been given to well-known individuals who have made distinguished contributions to the field of primary education, beginning with Martin Luther, whose work emerged in the sixteenth century, down through Rousseau and Pestalozzi of the eighteenth and nineteenth centuries, to Susan Blow and Patty Smith Hill of the nineteenth and twentieth centuries. The reader of this book will find challenging, satisfying, and tormenting queries on primary education. Unusual care has been taken to define terms used by the author in subsequent discussion of important matters.

With children as the focal point of attention, teachers, principals, superintendents, and parents, also, are recognized as cooperating participants in the education of younger children. Reporting to parents, daily schedules, lesson plans and assessments of pupils are given deserved attention.

The last paragraph of Chapter 10 reflects the "practical" nature of this volume. "Schedules, lesson plans, pupil assessments, are all part of the pattern of primary education. When a teacher begins to appreciate the multitude of designs in which these field problems appear, then is the time that action research begins in the classroom. Haphazard education should end when thought is brought to bear upon curriculum, community, and teaching methods."

The last chapter entitled "Questions and Half-Answers" is fascinating in its stimulating quality. Dr. Davis declares, "We need not fear half-answers, for they leave the door open to further thought—we need only fear 'half-baked' answers and their resulting misdirected programs." The major questions raised in this chapter are the following: What is the real value of kindergarten experience? Should schools have 4-year-old junior kindergarten programs? What is a good minimal entrance age in organized education? Should a child be retained at the 4- or 5-year-old level? Should the primary school be ungraded? How much grouping should be done in the primary grades? Will team teaching or teachers' aides be effective in the primary grades? How can we meet individual differences when we instruct? Are concrete experiences the dominant methodology of primary instruction? What can the classroom teacher do about the bilingual child? What is good discipline for the primary child? How can the primary teacher preserve the child's creativity? What can the classroom teacher in a self-contained class organization do for the "uncommon" child? Should the primary-grade pupil have homework?

The six appendixes present remarkable guides to essential sources of instructional materials including equipment, books, recordings, and films, classified in terms of function to be rendered. Sources of testing materials and basic data-gathering forms are also provided.

I repeat, this is an interesting, stimulating and highly useable work. It will prove valuable not only to those directly responsible for the education of boys and girls at the primary level but also to all workers in educational institutions, including parents.

JOHN GUY FOWLKES

Preface

"Here we come!"

"Where you from?"

"New Orleans."

"What's your trade?"

"Ice cream and lemonade."

"Show us something if you're not afraid."

So goes the infectious and innocent game for young children. To the writer the education of the young contains the same infectious and innocent spirit found in the game of "New Orleans." In the child's game each team acts out its trade, and tingles with the hope that it will be captured. In his trade, each teacher acts out the oldest occupation of society. Directing children along the patterns culture demands is the professional game played, shuffled, and told in retrospect in the retiring years.

It is hoped that the chapters within this volume will help the reader to understand the meaning and develop a practical analysis of the total plan which brings each generation into the light of today and yesterday. The significance of some chapters will be easy to grasp, but others will not, because our modern schools are too close to us for complete evaluation. Whatever its reception may be, it is the fervent desire of the author that the spirit of the book, like the spirit of the game, will be one of taking turns and that there will be a mutual relationship between reader and writer in which each may approach the other with, "Here I come and what's my trade?"

Within the years following the great Second World War, there

have been cries from the field entreating someone to direct the teachers of young children and define their role. Those giants of the past—possibly because they have been gone so long—appear to us to have possessed this organizing talent. Historically, however, the facts show that they in their time felt as leaderless as do we today. Yet perhaps because of this feeling, they may have developed into stronger figures than if they had considered themselves as leaders.

The task of guiding primary school children is not one that necessarily demands constant leadership, nor is it a trade that once learned is never forgotten. Rather, teaching the young child is a never-completed pyramid that rests on earned dividends and speculates on the margins of new ideas and insights. The strength of today's primary schools will be found in tomorrow's adults. Those who have the patience to look back can discover that in the past good programs and great teachers existed. We may feel leaderless and cry out for guidance, but American education tires easily of one pattern and one voice. We are not in need of a leader but of many leaders. Primary education as presented in these pages has a past, a present, and a future culminating in each teacher's recognition of his own point of view and his individual concept of field practice. Each chapter has been written with the intention of pricking the minds, questioning the activities, and inflaming the imaginations of each person who is now or is training to become an instructor of the young.

As the book was being written, on the writer's right hand sat his wife. A teacher by training, she has had the critical insight to suggest various beneficial changes in the finished product. The author and his wife have spent almost half of their married life team-directing a private preschool, and these years provide a mutual basis for case study and generalization.

Without the invaluable inspiration gained from contacts, both personal and indirect, with some of the finest teachers America has today, the author might never have been stimulated to write the book. Furthermore, many school experiences gathered from teaching primary children and supervising elementary student teachers have provided the meaningful concepts that are believed to underlie the application of these patterns of primary education.

Both the right hand and the left hand of the author were guided by a belief that this book must be written because there is so much

to be said for primary education and that much that has been said deserves to be given the test of time. American schools have developed into schools for the common man—such is the heritage we must pass on; however, it is our task in the next few years to make certain they do not make man *common*, to allow that would be disastrous for America. Each child is a unit within himself, a unique being, and primary education must start this individual on the path of both finding and developing himself.

D.C.D.

Introduction



Point of Reference: Overview

It happened one day that a fox was boasting to a cat of its clever techniques for solving the problems encountered in life.

"I have," he said, "a whole cupboard of ideas and activities that include a number of ways to beat the game."

"I have only one," admitted the cat, "but I can generally manage with that."

Just at that moment they heard the cry of a pack of hounds coming toward them. The cat immediately behaved as a cat and scampered up a tree and hid herself in the boughs.

"This is my plan," said the cat. "What are you going to do?"

The fox thought first of one way, then of another, and while he was debating which technique to use, the hounds came nearer and nearer. At last the fox in his confusion was surrounded by the dogs and soon captured by the hunters.

Miss Cat, who had been looking on, called down to him,

"Better one sure way than several on which you cannot reckon!"

In theory the primary teacher could find herself squarely between the fox and the cat. Yet when the time came to put theory into practice, she would probably side with Miss Cat. Any specialist must learn all the dominant patterns in his field, but one he must understand so thoroughly that he can apply it almost instinctively.

With the fable of the fox and the cat in mind, the author has arranged this book in three parts. The first establishes general reference points, and attempts to present the ideas that have infil-

trated present patterns through the great personages who worked with young children in the past. Another chapter identifies and analyzes several existing patterns for organizing curriculums for the young. Such guidelines are needed by teachers so that they may find their own point of departure and develop their personal interpretation of education of the young child. The last chapter in this section is devoted to the single concept which the author believes has caused the most confusion in the programs of primary education: play. The chapter discusses its history, its theory, and practical suggestions for equipment that will satisfy an operational definition of play in the primary school.

The second section of the book discusses the concept of treatment, covering various areas of content that will receive the three types of treatment held by the author to be the basis for content placement in the primary school.

The last part exposes the problems facing teachers in the primary grades. No matter what the pattern, philosophy, or theory of education held, there is still the realistic aspect of making it work in the school field situation. This third section takes a questioning approach to many problems that will deluge the inexperienced teacher and plague the experienced one.

It must be recognized that the task of becoming an educator of young children involves more than mere love for children and willingness to devote time and effort to work. It means long hours and even years of reflective thought, of deciphering the writings and thoughts of others, of developing a thorough and deep personal knowledge in order to increase one's own wisdom—always considering how these may be best adapted for children. But it's worth it.

Don't be treed—even though you've saved yourself from the pack of hounds as did the cat. Don't frustrate yourself by developing into a vertical file clerk with a cupboard of plans as did the fox. Be prepared, but most of all, know your points of reference—and practice them!

D.C.D.

Part I

Theory, Past and Present

Starting Point

There was once a man and his wife who one fine morning found an egg.

"Well," said the wife, "wait till it is hatched; and some beautiful bird will certainly come from it—some beautiful bird which will be the beginning of our fortune!"

And when the egg was hatched, what did they have? A chicken, and a very common one. But the man and his wife said, "Oh, what a nice common bird!"

And the bird began to crow and make a dreadful noise. And the man said, "How sweetly our dear bird sings! He needs no lessons to know the songs."

And when the bird-biddy snatched everything at the dinner table and spilled the cream, the good wife said, "What an appetite the dear thing has! He knows just what is good for him."

And when he tore up his school books and threw them away they said, "Oh! Our pet knows everything!"

And when he broke all the plates and dishes, they said, "How lively the dear thing is!"

After a time the bird grew so big that he beat the man, but the man only said, "How strong and stout he is growing!"

One day the bird went into the street and threw stones at the lamps and windows, and the husband and the wife both said, "Indeed, there is nobody like our bird in the whole town. He is no longer a young bird. He has come into his own."

But then came a bird who had been given vision, a happy, uncommon individual who had been given boundaries to mark off freedom's right. This truly uncommon bird caught the bird of the man and his wife and carted him away.

This time the husband and wife had nothing to say, because they did not understand!

Where is the starting point in the rearing and guiding of each new generation? Does it lie in the teacher's work, based on the simple belief that each individual has the potential and natural endowment that will make him civilized? Or is the starting point the home? There is no doubt that the primary teacher can say with confidence that her endeavors are important because they come so early in the child's life; yet this same teacher must be realistic in recognizing that there are others who have made deep impressions on the child in the years before he reaches school age. Or, on the other hand, is the starting point in every instance when men are given—and accept—the opportunity of becoming civilized individuals?

Who, then, truly starts the child on the road to civilization, and how? The honest answer can only be that all of us are responsible for a child's beginning. All of society, past and present, sets each new group on the road toward becoming the individuals of the new times. This starting point has no precise moment of origin unless, to be literal, we accept birth as the initial reference. Yet we have reason to believe that forces give the child direction before his birth. Perhaps we may say that the major starting point for an individual, or a generation, is the point at which those concerned show a desire to make concerted study for understanding their responsibility.

Enlightened parents begin with their point of reference, which is, of course, the family in our society. The home environment makes the core of impressions on the child. This stage of the

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child's life is the prelude to establishing his right to happiness, health, and self-expression, but does not fulfill these goals completely; they persist as objectives of the home and those other agencies, institutions, and chance factors that enter into the child's formation.

This book specifically concerns that area affected by the primary school. It is written from the assumption that primary education has been and still remains the first attempt on the part of the older members of society to systematize the reference points of the child's development.

Early childhood education is often said to be solely responsible for satisfying the three basic rights of all free children. These rights—happiness, health, and self-expression—fall principally and fundamentally into the core experiences of the home. The primary school takes these rights and builds them into a whole by adding a fourth right, which contains the germ of the conditions that should provide meaningful education: the right of the child to become a civilized person.

The author sees the education of each new generation falling into certain general patterns. The root patterns are found in the home, where informal incidental instruction sets the value system for the child. The home environment is one of constant interaction, and it really never ceases to have an effect on the young until complete independence is attained. Even as an adult, the individual still remains under the influence of these root impressions unless reflected effort is made to modify them. This early framework on which all that comes afterward must be hung is given new direction through the institutions that have been organized to help the individual and the family in the education of the young and, in many cases, of the adult.

The church begins to influence the family and the young with the first issues of moral values, based on patterns of ideas conceived in ages past. It was the church that took the random quality out of experiences and began to organize activities for goal fulfillment. In an indirect way the community also leaves a mark on the young child. The laws, opportunities, provisions, and ideals that are set by the community contribute to his growth.

It is in the realm of the school, however, that the community finds a definite place in the child's beginning; it is in the school that sys-

tematic patterns of training and instruction are first arranged and imposed on the young. The new teacher must understand these patterns if she is to be an adequate instructor of the young. Schools in our American society have accepted the responsibility of making the American child literate and civilized. The time has come for all of us to pinpoint—as nearly as possible—what we mean by literacy and civilization.

“ . . . the husband and wife had nothing to say, because they did not understand!”

Let it not be said that primary teachers have nothing to say because they do not understand. Today's young children have more to acquire and to assimilate than those in the past because of the cumulative effect of culture. Becoming aware of the numerous patterns that are applicable in helping the child along the road of civilization is a challenging task. In this section we will present some of the patterns—and pattern makers—of the past, and set down some guidelines for the present.

Great Names and Great Ideas

Children's literature is peopled with many giants—the Selfish Giant, the Amiable Giant, Jack's Giant, the Tailor's Giant, and Du Bois's Giant. Such giants have strode across the lives of young children from time immemorial, and yet not one of them will leave as indelible footprints as those of another group of giants.

These great giants who have so affected the lives of young peoples are the men and women who have had the imagination and drive to formulate programs and practices that are adaptable to the education of the young child. They are individuals who, because of their insight and their work in presenting ideas to educators, have altered behavior perhaps as effectively as have religions. Yet many of these giants had no inkling that they would make changes in educational practices—their only motivation was a desire to present concepts which they personally felt would improve life in their times.

Great ideas, like great men, change behavior. It is because of this that so many of our great men are not fully recognized until long after death. There is nothing right or wrong in failing to *identify* greatness when it is in our midst—this is natural. But we are wrong when we fail to *appraise* the programs and ideas that men and women have taken the time to write about, to work with, and to practice.

Time has magnified to a degree of greatness the ideas and theories of people who, in their own lifetime, contributed only slightly to young-child education. We may well find a way to change

the direction of the world in their collected suggestions, for each one has shown a steady moral influence, an imagination, and a creativity possessed by few in the multitude.

Martin Luther (1483-1546)

The Martin Luther who spoke as an educator through the Ninety-Five Theses of October 31, 1517, left marks which will never be erased. It was not the theological import of his pronouncements that directed schools to change but the reverberating theme *Docendi Sunt Christiani* (Christians Are To Be Taught) that hung an obligation on all society. Knowledge could no longer come to man through interlearning only. Monastic schools were quite willing to educate the scions of the aristocracy and the bright children of the common man, but this was not enough; for Luther, primary schools of the church must extend their services to *all* the children of *all* the people; and schools should broaden the educational goal to include not only piety but an understanding of the social obligation to make the community Christian.

Amid the confusion and revolutionary issues present in this period of history Luther presented and crystallized two further historic ideas. He spoke out for and directed efforts toward making towns and villages responsible for good primary schools, and by so doing split the responsibility between the two institutions of the church and the local government. This and the matrix statement that Christians must be taught were not entirely original with Luther, but it was he who developed them into a practical program and set them in motion, thus solidifying the scattered beliefs of those before him.

The third contribution that Luther made to children's education, one we seldom recognize, was the teaching of music. His background and interest made it possible for him to stress this idea to the point where it took root and branched out over the centuries and the world. Music to Luther was the salve for tired souls. He believed it to be such an important art that primary teachers should be skilled in it. He found strong support for his belief in the place and use of singers and soothing music spoken of in the Bible and so esteemed by kings and princes.

Martin Luther's ideas have contributed greatly to the modern school, especially by making music a major curricular area. His

statements on universal public education are matters for adult gratitude, but the young child receives his heritage from this great man through his yearly singing of

Away in a manger,
No crib for a bed,
The little Lord Jesus
Lay down His sweet head.
The stars in the heavens
Looked down where he lay,
The little Lord Jesus
Asleep on the hay.

John Amos Comenius (1592-1670)

Some men became giants because of timing, the chance factor of being born and nurtured by the problems of their age. Others studied and became imbued with the thoughts of those who had come before them. John Amos Comenius was this sort of giant, a man whose greatness lay in his selection from the thoughts of men like Bacon, Erasmus, and Montaigne. Comenius stands out as the most systematic, imaginative, and comprehensive educator of several centuries.

Two hundred years after the death of Comenius came the first feeble international recognition of a man who had left the world better educated than it had been when he entered it.¹ Born to a miller's family in Czechoslovakia and orphaned at an early age, Comenius, a Protestant and a mystic, lived in a time of civil and religious wars. As we read the material he left concerning education, we grow humble with regret that we have not made better use of his great ideas.

Comenius's dream of education was not the organized protection and guidance given in monastic schools. Rather, he saw education beginning in early infancy at the age when learning is *absorbed*, not forced. Comenius's "school of the mother's knee" was the prototype of preschools, nurseries, and primary grades of today. The activities and approaches suggested by *Informatorium* (Guide for Infant Schools) still may be used in modern schools.

Comenius thought that children are malleable and adjustable

¹ See *The UNESCO Courier*, November, 1957. UNESCO has made available film strips, reports, and books in honor of this international educator.

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beings, that as they grow in body and mind their horizons can be continuously enlarged and colored. The real sense of mental awareness must start, however, with those elements which the child's senses can grasp. Words should be taught and learned only in association with things. All instruction should have objects denoting the words taught. Everything that the child sees, hears, touches, or tastes must be taught with words that express the object or thing.

Following statements from Comenius's books *The Great Didactic*, *Informatorium*, *Prodromus Pansophiae*, and *Orbis Sensualium Pictus* may give today's educator direction and encouragement which will make classroom practices vibrant and purposeful.

Do not undertake any teaching without first arousing the interest of the pupil.

Always offer something which will be both agreeable and useful; the pupils' minds will thus be primed and they will come forward eagerly with ever-ready attention.

The development of the mind is based on the love of learning. Before setting about making of his pupil a well-cultivated mind by cramming him full of rules, the teacher should make him eager for learning and, better still, capable of receiving learning. Generally speaking, the teacher takes his pupil as he finds him, each one setting about at once turning, tanning, carding, weaving, and modeling him as he thinks fit. The child is expected immediately to become a well-formed product, a polished jewel.

Schools should be set amid gardens where the children will enjoy the beauty of the trees and flowers.

There should be four different schools for children . . . cycles in which the children would be separated according to age and may be called four major periods of education: infancy (Mother's Knee), childhood (Vernacular), adolescence (Gymnasium), and youth (university and travel).

Though these [four] schools be different we do not wish them to teach different things but rather the same things in a different manner. I mean, all things which can make men truly men, and the learned really learned; they should be taught in consideration of the pupil's age and the standard of his prior preparation, which should always tend gradually upward.²

Comenius recommended that the teacher take his students on visits to "manufactories" and on field trips to study nature. In this way "children will be engaging in studies which will give them as much pleasure as if they had spent the day playing games."

² These statements were taken from *The Great Didactic of John Amos Comenius*, translated and edited by M. W. Keatinge, 2 vols; Black, 1921-1923, Macmillan.

"Anatomy should be taught by dissection. And when it is not possible to show pupils the real viscera they should be given ocular demonstrations of livers, lungs, intestines, etc. made of leather and stuffed with wool."

In *The Great Didactic* Comenius advocated team teaching or departmentalized school organization.

Divide the classes into groups of ten each led by a monitor, with a head monitor in charge of several groups, so as to stimulate attention and give all the pupils the benefit of what any one of their number says. As soon as the leaders of the divisions have secured attention, one scholar should be called upon to stand up and choose as his adversary any other scholar that he pleases. The pupil then reads out his exercise sentence by sentence while the entire class listens. At the end of each sentence the scholar stops and his adversary has the opportunity of pointing out any mistakes. Then other scholars in the division, and after them the whole class, may make criticisms on the rendering, and finally the teacher supplies any point that has been omitted. . . . Then the adversary should read out his in the same way.³

Comenius pleaded for classroom walls to be hung with pictures representing famous men and events of history, maps, and other illustrations, as well as "models of all kinds to assist the memory to retain ideas and facts." Attractive appearance of the classroom "teaches the child, when he grows up, to beautify his home and make it more pleasant." Comenius encouraged art education as a part of the curriculum.

He protested against long school hours and overwork for children.

Children should not attend classes for more than four hours during the mornings, leaving the afternoon free for singing, drawing, and dancing.

Not only are the children of the rich and the noble to be drawn into school, but alike gentle and simple, rich and poor, girls and boys in great towns and small, down to the country villages. Everyone who is born a human creature should be educated.

Let no one be blamed for the errors of the past. . . . As in educating the young, what matters is to lead men from the known to the unknown and to lead by peaceful means and never violent ones.

First of all, it is essential that all persons learn to read and write.

Just as the whole world is a school for the whole of the human race, from the beginning of time until the very end, so all life is a school for every man, from the cradle to the grave.⁴

³ *Ibid.*

⁴ *Ibid.*

Such statements taken from manuscripts left hundreds of years ago demonstrate the vitality that exists in ideas germinated in the reflective mind of a giant. John Amos Comenius was responsible for many brilliant innovations such as pictures for teaching vocabulary, the use of visual aids, and pleasant classroom atmosphere for learning.

The vision that Comenius conceived for world education—universal peace and progress—is yet a dream, but the world is richer because of his concepts. And we can only believe that someday, throughout the world, we will see the fruits of the concentric circle of learning as he described it. Primary teachers have in John Amos Comenius the father of the primary school although, sadly enough, many have never heard of him. And all teachers, remembering the efforts of Comenius to bring visual aids, books, mass education, interest, motivation, preparation, and methodology to bear on the problem of man's education, have in him a model for reflective analysis of twentieth-century schooling.

John Locke (1632–1704)

Quite often by accident, some giants become universally better known than others. It is not always because their insights and offerings are greater but simply because they express themselves in a way that is acceptable to the times and the mood of the people. John Locke, through his book *Some Thoughts concerning Education*, has been included in almost every educational history and philosophy text, while Comenius, Plutarch, Quintilian, and Erasmus are frequently overlooked, though when we read Locke's work we are in a great sense reading their thoughts.

John Locke's influence was felt in America through our statesmen Thomas Jefferson and Benjamin Franklin, both of whom influenced higher education. Initiative, independent judgment, observation, and critical use of reason were the key words to Locke's concept of education. From these factors which today are incorporated in the concept of the creativeness of the mind, education was lifted further out of sterile practices.

The liberal element in Locke loosened the American mind, and concepts introduced by his forceful writing gave educators an open field for work. The *tabula rasa* belief, which Locke adapted as a

principal thesis, became a challenge. Assuming that the mind of a child at birth is a blank tablet upon which all experience will make impressions gave the adult and professional educator the signal to select and present the best and the most correct impressions to the young child. Though the evidence available today contradicts this assumption, the field of education nonetheless benefited greatly from the stimulus it provided.

Locke concerned himself with what he called constructive instruction. The adult training the young should approach learning from a positive standpoint. For example, in changing a wrong habit in a child, the teacher should not emphasize the wrong habit but rather set about introducing and emphasizing a better one.

Many of our giants have stressed written language as a major source of educational material. John Locke listed several books he believed should be imprinted on the child's mind, and was able to influence publishers to print *Reynard the Fox* and *Aesop's Fables*. Quoting from Locke's *Some Thoughts concerning Education* we can illustrate the great value of literature in the education of young children.

To this purpose I think Aesop's Fables the best, which being stories apt to delight and entertain a child may yet afford useful reflection to a grown man; and if his memory retain them all his life after, he will not repent to find them there, amongst his manly thoughts and serious business. If his Aesop has pictures in it, it will entertain him much the better, and encourage him to read when it carries the increase of knowledge with it; for such visible objects children hear talked of in vain, and without any satisfaction, whilst they have no ideas of them; those ideas being not to be had from sounds, but from the beings themselves, or their pictures. And therefore, I think, as soon as he begins to spell, as many pictures of animals should be got him as can be found, with the printed names to them, which at the same time will invite him to read, and afford him matter of inquiry and knowledge. *Reynard the Fox* is another book, I think, that may be made use of to the same purpose. And if those about him will talk to him often about the stories he has read, and hear him tell them, it will, besides other advantages, add encouragement and delight to his reading, when he finds there is some use and pleasure in it. These baits seem wholly neglected in the ordinary method; and it is usually long before learners find any use or pleasure in reading, which may tempt them to it, and so take books only for fashionable amusement, or impertinent troubles, good for nothing.⁵

⁵ John Locke, *Some Thoughts concerning Education*, Harvard Classics, vol. 37, Colliers, 1910, p. 156.

If John Locke had not kept one eye on temporary conditions rather than directing both toward the mountain he would have become a greater giant. Some of his ideas, such as the pauper schools for children from 3 to 14 years of age, smack of the pigeonholing that the uninformed social reformer resorts to. It was left for Rousseau who followed Locke to extend the ideas expressed by the Englishman, and for the very same short vision to miscalculate and confuse some educational issues.

Jean Jacques Rousseau (1712-1778)

The words of Robert Ulick in his *History of Educational Thought* characterize the man Rousseau whom people molded into a giant: "It would be difficult to find a man in the history of thought who with so much half-truths has made as deep an impression on mankind as Rousseau. Perhaps only Nietzsche can in this respect be compared with him."⁶

Such an uncomplimentary statement would not lead us to rank Rousseau with the giants of Comenius's and Pestalozzi's stature. The irony of it is, of course, that people sometimes profit more from half-truths than whole truths. Rousseau had a gift of expressing his thoughts in a way that made sense to the common reader, and because of this skill he was able to promote ideas that others had conceived.

However, it is not our purpose to judge Jean Jacques Rousseau but to understand the implications of his educational manifesto *Émile*.⁷ Using a fictional approach, Rousseau changed education by showing how Émile was educated under a plan designed according to nature.

In contrast to the approaches presented by Locke and Comenius, Rousseau would begin the child's education away from organized society. Placing the child in an environment where nature, as defined to mean the child's life instead of the church, state, or society, was dominant was in itself a revolutionary concept. Rousseau's early stages of education took the child through an unconscious state of existence and then the infancy period when the child learned from environmental contacts through the pleasure-pain principle. During

⁶ Robert Ulick, *History of Educational Thought*, American Book, 1945, p. 211.

⁷ See Jean Jacques Rousseau, *Émile for Today*, Heinemann, 1956.

these first two periods the child was to receive no punishment; all pain should be learned from natural reactions to contacts in situations. No books or abstract ideas were to be given the child during these early formative years, and not until his eleventh year was he to see written literature. And then the first book the young child would be given was not Aesop's *Fables* as suggested by Locke but the adventures of *Robinson Crusoe* by Daniel Defoe.

Pinpointing some of the implications generations of educators have distilled and attributed to the influence of Rousseau, one finds many practices today that are rooted in this romance. The following points are either directly derived from *Émile* or, because of Rousseau's mystical writing technique, are credited to him.

1. Play is the keystone to learning. The child's life should not be burdened with studies which seem uninteresting and unimportant to him.
2. Lessons should be learned from free activity which allows the child to interpret life from personal experiences.
3. Education is a process of growth. The original nature and capacity of the child determine the direction and depth that learning will take. Educators are to evaluate this capacity, not alter it.
4. Adaptation and adjustment are education. Experiences with heat, cold, hardness, softness, sharpness, and other sense reactions are to provide the pain-pleasure base of education.
5. The child is born good, and the goal of an education is to maintain the good of nature in balance with the good of society.

These five points are still very much alive in educational discussion. Yet had Rousseau been more definite the changes brought about by *Émile* might have been longer in arriving. The mystical quality of Rousseau's style made it possible for the reader to interpret the meaning of nature, traditions, society, and freedom for himself; each reader brought to and took from the book the greatness of giants before him and that within himself.

Johann Heinrich Pestalozzi (1746-1827)

Reading the letters of Johann Pestalozzi gives one the feeling that he is listening to the poetic voice of the redeemed Selfish Giant as portrayed by Oscar Wilde. Everything Pestalozzi wrote and did is surrounded by the power of love and gratitude. Pestalozzi's con-

tribution to the education of young children was to add the missing ingredient to the combined philosophies of his predecessors, all of whom had ignored it except the teachers of religious thought.

Beginning education with the premise, "Man is the same whether on the throne or in a hut; what is he in his innermost nature?" Pestalozzi was able to put education on a problem basis and seek the development of man through an understanding of his own nature. This Swiss educator, living in the days of our country's awakening, left three writings which, when studied with care, still provide meaningful comment on education for the young. The books *Leonard and Gertrude*, *How Gertrude Teaches Her Children*, and *The Evening Hour of a Hermit*⁸ contain a novel romantic form of writing that too often is mistaken by the reader as light, if not sometimes whimsical. The truth and value of these books can be found in major insights hitherto unknown in writings on educational concepts or reforms.

The fruits of Pestalozzi's concepts are to be found in his singular ability to practice the philosophy and theories he conceived. Reading *How Gertrude Teaches Her Children* one is carried into a world where the application of the theories of love, justice, equality, and individuality are present as simple, everyday practices.

It is the result of Pestalozzi's practices and beliefs that today love has become an educational factor. Many new students are drawn to primary education because, as they say, they love children. This ingredient, love, is not the mother's affection, which is thought to be second nature, but rather an idea that can be defined by encompassing the syndrome of related factors: gratitude, justice, and fellowship at least constitute identifiable parts of love. The interplay between these three allows the child to discover that love is a very special thing.

Pestalozzi's influence comes down to us not only from his writings and the methods he applied in his own school situations but also through the impressions received by visitors to his school. We have not yet collected all of the valuable ideas recorded in the diaries and letters of those persons.

Human equality, according to Pestalozzi's theory, is tempered

⁸ Johann Heinrich Pestalozzi, *Leonard and Gertrude*, Heath, 1907; *How Gertrude Teaches Her Children*, Allen & Unwin, 1915; *Letters on Early Education*, Bardeen, 1906.

and directed by individuality, and the person who understands his individual nature and is assured of equal rights to attain productivity has found happiness. His classes were designed to use methods of individualized instruction which still gave each child the opportunity to learn the foundational aspects of subjects. Pestalozzi's curriculum stressed the importance of sound, form, and number as found in each subject area and experience. Today's educators are emphasizing these same concepts when they explore individualized reading and individual assignment approaches.

In a letter to a friend Pestalozzi wrote the preamble to educational philosophy for today and far into the days to come.

We must bear in mind that the ultimate end of education is not perfection in the accomplishments of the school but fitness for life; not the acquirement of habits of blind obedience and of prescribed diligence, but a preparation for independent action. We must bear in mind that whatever class of society a pupil may belong to, whatever calling he may be intended for, there are certain faculties in human nature common to all, which constitute the stock of the fundamental energies of man. We have no right to withhold from anyone the opportunities of developing all his faculties. It may be judicious to treat some of them with marked attention, and to give up the idea of bringing others to high perfection. The diversity of talent and inclination, of plans and pursuits, is a sufficient proof for the necessity of such a distinction. But I repeat that we have no right to shut out the child from the development of those faculties also which we may not for the present conceive to be very essential for his future calling or station in life.⁹

We have not yet discovered the balance between the factors of love, equality, and individuality so important in Pestalozzi's method and the demands of a set curriculum. When we do, we will have taken a large step forward in the educational goal of developing a social conscience in all mankind.

Friedrich Froebel (1782-1852)

In the steps of giants walk other giants, and even though those following do not take as great strides or make as deep imprints as the first, their footprints are more easily recalled, oftentimes, merely because they were last. So it is with the world's memory of Friedrich

⁹ Johann Heinrich Pestalozzi, *Letters on Early Education*, Bardeen, 1906, pp. 101-102.

Froebel, a disciple of Pestalozzi. Whereas Pestalozzi was more a philosopher, Froebel became an organizer, putting the insight and ideas of Pestalozzi into imaginative practice. He systematized young-child education and made it possible for persons to be trained to teach rather than relying on the natural intuition for instruction. Froebel's contributions were for the child from age 3 to 7, although today the age span of 3 to 5 is linked with the educational concept most often evoked by his name: the kindergarten, the garden where the young child may grow like a flower if nourished with the training Froebel considered essential.

Cataloguing the inheritance left young-child education by Froebel gives rise to the hope that more giants of his measure will walk upon today's educational scene. He emphasized the senses and emotions as a part of the education field, an aspect that Pestalozzi has underrated. Froebel's keen observation of children at play provided the practical basis for his teaching approach of *gifts* and *occupations*, and the organization and systematization of his selected gifts was in itself a major contribution. Stressing the principles that governed systems of instruction lent a scientific approach to future young-child education. Through his courses for training young ladies in his system of education Froebel indirectly created the belief that women should be the teachers of young children, an idea that still persists in America and probably will for many years to come in spite of efforts to dispel it. Three words describe the work of Froebel: *unity*, *continuity*, and *simplicity*. Even today they may be used as watchwords for the profession, although they may more often appear in such terms as *wholeness*, *scope*, *sequence*, and *utility*.

It is not necessary to remain long in a typical American kindergarten to discover representations of Froebel's ideas. The use of finger play was stressed by Froebel, although not so much for kindergarten as for infant development. His book *Mutter- und Koselieder* (Handbook for Young Mothers with Babies in Arms) presents selected types of physical play and songs that unfold or explain the life surrounding a child.¹⁰ Froebel relied on observation as the initial source of finding activities and objects for education, and yet whatever he selected for educational use was first exposed

¹⁰ Friedrich Wilhelm August Froebel, *Mutter- und Koselieder*, Appleton, 1895.

to the criterion of their contribution to the unity of the child and the continuity of development. He was outstanding in his ability to defend and describe the exact purpose of any object or activity he offered the children in his school. Block play, cutting, folding—in fact, the majority of the activities that are dominant in our primary schools were developed and placed in the curriculum by Froebel.

The most striking and perhaps the most original of Froebel's kindergarten methods were the gifts and occupations. The *gifts* were concrete, tangible objects which for 15 years or more Froebel had observed children playing with. These gifts were chosen for the inherent and indirect endowments Froebel believed the object to have. The play or activity that Froebel directed the mother or the teacher to use with the gift and the child was referred to as the *occupation*.¹¹ One of the first gifts was a primary-color yarn ball. It was presented to the child with the occupation of rolling it, throwing it to the left, right, and over, or making it into a whirling object or pendulum by tying a piece of string to it. As the mother or the teacher and the child occupied themselves with this gift of yarn, the child learned through the adult to associate words with action and object: *red, soft, up, down, to, fro, right, and left*.

Froebel selected these gifts and occupations on the premise that each would enable the child to interpret his surroundings and give expression with movement, gestures, and words to the world within and without.

Friedrich Froebel's name is synonymous with the kindergarten and such statements as "Come, let us live for our children," but these are only a part of the inspiration he lent to the entire modern educational system. Strip away Froebel's emphasis on metaphysics, symbolism, and oneness of life, and every primary teacher will find practical methods and occupations for the training of the young. Reading a few of his essays—"Play and the Playing of the Child," "How Lena Learns to Write and Read," "The Children's Garden in the Kindergarten," "Movement Games," "The Child's Love of Drawing," "The Second Survey of Games"—will bring deep respect for this man of education.

Careful observation of children's play activities and cautious analysis of the child's nature gave Froebel's systematic curriculum

¹¹ See Kate Douglas Wiggin and Nora Archibald Smith, *Froebel's Occupations*, Houghton Mifflin, 1897.

a practical aspect that stimulated modern movements in education. His name in the mind of the layman stands for the kindergarten which, although history shows he did not originate, he developed to the importance it has today in our education system. As well, he was the innovator of a host of concepts—self-activity, gifts, occupations, and unity—that contribute to present-day value of young-child education.

Maria Montessori (1870–1952)

If Maria Montessori could pick up a recent catalogue of educational equipment for the primary grades she would discover page after page listing her didactic apparatus—a fact which illustrates that the acceptance of ideas may occur years after the person who developed them has died. Maria Montessori is now wielding an influence through all our primary schools that would baffle her, considering her unsuccessful personal experiences in America. The first woman to receive a medical degree from the University of Rome and a pioneer in the education of exceptional children, Dr. Montessori was an Italian giant who deserves the study and reflection of today's primary teachers.

It is not only for her teaching apparatus and her modification of other didactic material originally used by Édouard Seguin in training the feeble-minded child that we remember Dr. Montessori. Her contributions encompass such original concepts as self-control, liberty play,¹² attention training, and sensory equipment.

The fundamental principle behind the educational program advocated by Dr. Montessori was the concept of liberty play and its spontaneous manifestations. She organized and constructed the equipment and activities with which the child was to occupy his school hours, but under her program the child was free to select those occupations he desired and to remain at them any length of time. He was trained through this freedom to choose for himself and to move purposefully and intelligently around the schoolrooms.

Upon entering the school the children were given a period to check their own personal cleanliness. They taught each other to put on smocks, tie shoelaces, and care for themselves in the toilet. After this personal check-up they made a tour of the room to see

¹² *Liberty play* is this writer's term.

that everything was in order for the day. Dusting, rearrangement of furniture, and general housekeeping duties were accomplished by all the children. The numerous pieces of didactic equipment, such as lacing boards, insert boards, measurement sticks, and hooking boards, were at the personal disposal of the children. These teaching materials were self-corrective and called *auto-educative* by Dr. Montessori. In a manner similar to that of the teaching machine idea in vogue today, the child was rewarded when the apparatus was back in its normal condition.

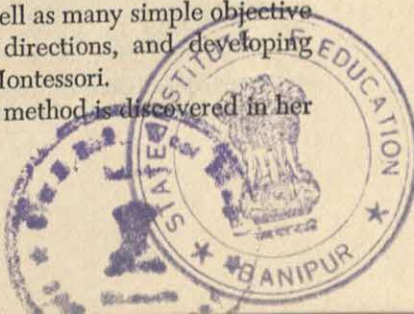
Several distinctive features of the Montessori educational method should be studied for adaption today. Some of her methods do not satisfy present-day approaches; for example, the lessons for teaching the meaning of *zero* may be as confusing as some of the common personification lessons we still find in primary schools. But the ideas and lessons she developed for teaching attention, the meaning of silence, habits of quick thinking, and tactile sense are interesting and valuable.

Particularly in the field of physical development should Dr. Montessori's material be re-evaluated. Her system of muscular education consisted of a series of exercises aimed at securing the normal development of natural physical movement—respiration, walking, and talking. Training devices such as the swinging chair, parallel walking bars, circular steps, and the pendulum were unique. The swinging chair was designed to strengthen the child's leg and knee joints, and was suspended in such a way that the soles of the feet came in contact with a vertical plank or wall, causing the child to use his legs in an up position to keep the swing in motion. The pendulum play, in which children sat on stools about a rubber ball which was suspended by a cord and struck it alternately, reminds one of the game of tether ball.

Maria Montessori's work has never been fully accepted in America, and her personal trip to this country left some impressions on both sides which have colored real evaluation. The recent emphasis on the education of exceptional children has re-established some of the tangible materials such as the posture chair, the tactile box, insert boards, and counting devices, as well as many simple objective lessons concerning listening, following directions, and developing the habit of attention advocated by Dr. Montessori.

The practical nature of the Montessori method is discovered in her

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description of the physical plant necessary for the education of young children. The children's school should "be a real house; that to say, a set of rooms with a garden of which the children are the masters. . . . This kind of school is not of the fixed type, but may vary according to the financial resources at disposal and to the opportunities afforded by the environment. . . . The furniture should be light so that the children can move it about, and painted in some light color so that the children can wash it with soap and water. . . . each child should have a little flower plot, in which he may sow the seeds of some indoor plant."¹³

The men who have influenced children's education wholeheartedly embraced, along with Froebel, the place of women in the training of the young. Yet though the world found in Maria Montessori a woman unique among those dedicated to the field, her program has yet to be fully accredited. If one considers the times and the conditions under which she worked, many of the points which now seem out of date fade into insignificance, and her major contributions of liberty play, self-corrective activities, individual instruction, and didactic apparatus come to the fore.¹⁴

Susan Blow (1843-1916)
and Patty Smith Hill (1886-1946)

Susan Blow and Patty Smith Hill are too close to the American scene to ascertain their stature. Time and the writers of education history will decide their place in the future, but in the meantime they can be credited with contributions and efforts of considerable value.

Susan Blow pioneered in establishing kindergartens as part of the public school system. There had been others who had brought the concepts of Froebel to bear—Mrs. Carl Schurz, Miss Elizabeth Peabody, Mrs. Quincy Shaw, and Mrs. John Kraus gave the kindergarten movement direction through private schools and philanthropic and literary efforts. But it was Susan Blow who experimented in St. Louis under the direction of William T. Harris and established a pattern that was followed in almost every community in America. Susan Blow not only established public kindergartens

¹³ Maria Montessori, *Dr. Montessori's Own Handbook*, Stokes, 1914.

¹⁴ Theodate L. Smith, *The Montessori Method*, Harper, 1912.

following Froebel's curriculum, but in her later years as new ideas came into the foreground was to be the prophet of today's state of primary education and the decline of Froebel's influence.

Because so many of Froebel's theories—the occupations that were orientated with many of the gifts—were misunderstood or misapplied, a great deal of his program came under the critical judgment of John Dewey and Patty Smith Hill. During this transition period which blended Froebel with progressive ideas, Susan Blow made many analytic statements that bear remembering, among them these comments, taken from a 1904 monograph:

Two great dangers assail the kindergarten and threaten to impede its progress towards the realization of Froebel's ideal. The first of these dangers is reversion to instinctive games and traditional toys. In some kindergartens, children are taught to play street games, while it has recently been urged that peg boards, tops, bean bags, kites, dolls, jack straws, hoops, spools, chalk and wire games, and the whole toy world should be added to the Froebelian instrumentalities. He recognized in traditional games the deposit of unconscious reason . . . and presented a series of games . . . which . . . win for the ideas they embody a controlling power over the imagination. In like manner, from among traditional toys he selected those which possessed most [the] educative value . . . and suggested a method by which they might be consciously used to interpret the child's experiences and develop his creative power. If this transfiguration of traditional games and toys is valueless, then the kindergarten has no *raison d'être*. But if Froebel has translated the hieroglyphic of instinctive play and found means which, without detriment to the child's spontaneity, influence the growth of character and the trend of thought, then the clamor for street games and promiscuous toys is educational atavism.

The second danger which threatens the integrity of the kindergarten is the substitution of exercises which attempt to wind thought around some arbitrarily chosen center for those Froebelian exercises whose confessed aim is to assist thought to unwind itself. Too many kindergarteners have allowed themselves to be betrayed into selecting some object such as a pine tree or a potato and making all songs, games, stories, and gifts, exercises revolve around it. . . . To lead pupils away from what is capricious, arbitrary and accidental, and thus capacitate them to receive and augment their scientific, aesthetic, literary, and psychologic inheritance is the great duty of education. The substitution of arbitrary for necessary Cores of thought wherever attempted is, therefore, the parody of education.¹⁵

¹⁵ Susan Elizabeth Blow, *Educational Issues in the Kindergarten*, Appleton, 1908, pp. 185–189.

Such statements are as apropos as if they were uttered this very minute. Education will always need those who can see through changes with an eye to what was and what is and what could be.

The time in which a person lives often molds the life he leads. At any other time in history Susan Blow and Patty Smith Hill probably would not have found themselves in opposite camps as they did during the early twentieth century. Because of the period, their personal inclinations, and chance contacts, these two dynamic ladies were involved in a triangle of educational philosophy—Froebel's, Montessori's, and Dewey's—referred to as the radical-conservative clash in the international kindergarten movement. Susan Blow defended the Froebelian program, Patty Smith Hill became a disciple of John Dewey, while Montessori had no outstanding American defender unless one considers the efforts of Colonel Francis Parker, who pioneered the unification of kindergarten programs with the primary grades of the elementary school.

Susan Blow used the speaking platform and written word to state the values of following principles established by Froebel. Patty Smith Hill accepted a faculty post in 1905 at Teachers College, Columbia University, and as a professor of education she was able to interpret and apply the theories of Dewey in the primary grades.

Someone described teachers following the two divergent programs as the cookbook and the checkerboard types. The cookbook teacher measures out so much of each subject according to a pedagogical recipe and then gives it to the children the next day. This kind of teaching is easier, but from the child's point of view the other—the checkerboard teacher—offers the most possibilities for adventure. The latter is concerned with the reaction of the mind, not only with "gifts and occupations" or subject matter.

Such oversimplification along with many other illogical statements caused a great deal of misunderstanding of both programs. During the period the two were being debated, the normal schools and colleges training primary teachers were fusing the ideas of Froebel, Montessori, and Dewey. The result has been our present state of early childhood education which follows no major American pattern.

Specific contributions, given direction by Patty Smith Hill, may still be observed in the primary grades, for example, the emphases

on the individual creative power of the child, flexibility, inventories of children's motive power, small group instruction, and utilitarian criteria for curriculum selection. Through her lectures and articles Miss Hill expressed the significance of purposeful activity and meaningful material that would stimulate the creative thinking of children.

Following many of the beliefs of Froebel she recognized the basic law of growth: self-activity. The departure from Froebelian philosophy came in her insistence on the student's free choice, a flexible schedule, and a program which afforded the child and teacher the selection and organization of those activities and experiences common to all. Individual play with gifts was encouraged and dictated activities (occupations) were de-emphasized. The curriculum was selected by discovering, through observation and inventory techniques, the motive power of children and content. The child's interests, tendencies, impulses, and drives were considered as criteria, and the motive power of content was interpreted as the accumulated experience of past and present civilization.

The curriculum that Patty Smith Hill suggested for primary grades may be found in the book *A Conduct Curriculum*.¹⁶ The basic precepts included nature study, literature, music, games, gifts and occupations, dolls and doll families, conversation, industry, blocks, health, and values. The nature content was to become the background of the child's consciousness and the setting for human activity. Nature topics were selected in relation to human needs and interests. The sun, moon, stars, winds, rain, and snow were considered personal matters to a young child. Literature was regarded as the means of interpreting one's own experiences. Stories were selected that followed rather than preceded or foreshadowed an experience. Games were favored for the cooperative social training inherent in them. The free use of dolls and doll families was made the center of the play equipment.

It has been said of Patty Smith Hill that she was interested in the growth of children, not the development of an educational system. Because of this her work stressed the utilitarian aspect of experiences, and the here-and-now concept of primary education became a dominant trend.

¹⁶ Patty Smith Hill *et al.*, *A Conduct Curriculum*, Scribner, 1923.

Summary

Giants such as these have recorded the thoughts of their times and projected ideas well into the future. Yet in some ways we find ourselves not much further ahead in this century than were they who did their thinking in the past. In the passage of years, however, trials and errors have accumulated, and the new teacher who takes the time to comb the past should proceed tomorrow with greater comfort, if not assurance.

American primary education has several tasks facing it—of blending individuality with democratic responsibility, of combining meaningful curriculum with long-term educational goals. Teachers of the young are not capable of creating a new pattern alone, but because they have the “priority” period of training, their task is as important as is that of the university professor who teaches the mature student. This first period of education is valuable simply because it comes first in the dramatic sequence of human adaptation and development.

As a nation we must continue to borrow from our own past and other cultures and to fuse these elements under our own field conditions into a program that will define our free society. The conduct of primary educators will mirror the dignity of man, the justice, the equality, and the rights that belong to all individuals, whether they are 4 or 21 or 60.

A nation will wither if it does not make a collective attempt to provide meaningful patterned programs for its young. To leave such programs to independent communities without regard for the giants who offered clear and concise suggestions is to create a patchwork of personalities instead of ideas. We must turn to the giants of the past—and we must look about us for the giants of the present who are yet among us.

Guidelines

Throughout the ages of man, prophets have expounded on theories and presented programs of educational reforms for the training of the very young. Chapter 1 discusses a few of the great names and ideas that have permeated children's education. The colorful episodes which resulted from the literal application of these ideas by neophytes and eager followers have never been completely recorded, but teachers and parents must learn from the past that overzealous practice of theoretical programs may not produce the desired ends. Just as some mothers, inspired by Jean Jacques Rousseau's gospel of *retournez à la nature*, toughened their babies by ducking them in ice cold water which as often as not made them ill, many parents and teachers today are creating possible behavioral problems through overindulgence in permissiveness or zealous developmental level application. The child, the parents, the teacher, as well as all of society need guidelines for progress. Though errors from misinterpretation and misapplication of theories have been recorded, there is still a need to establish and understand guidelines. Out of the welter of great ideas that leaders have given the primary school, several forms of theoretical genius may be identified. To uncover these patterns, students and teachers must attempt to separate the parts (activities) from the whole (directions) and then reconstruct the patterns in order to disclose each theme.

Explanation of Terms

We will begin our discussion by examining some of the terminology commonly used in education. The words in this section have been defined as accurately and carefully as possible to coincide with

the author's meaning and yet be clearly understood by students being trained to teach the young.

It is hoped that teachers will compare and question the definitions and explanations given here. It is also urged that they acquaint themselves with the multiple meanings that words such as these have and that, in so doing, they become alert to the coloration that a sentence context can contribute to a word or phrase. Those who keep a weather eye cocked for such modifications will sense a subtle trickle of humor or despair running through any alphabetically written material.

Civilization: that state of a society in which a degree of attainment is reached consciously by its members in the areas of art, music, science, religion, government, and communicative tools.

Today's civilization: those cumulative values, inventions, knowledge, and material that have been collected from many cultures. It is not Western thought or Western concepts only but those operational values that have been communicated from the vast number of existing and extinct cultures which have contributed to our own.

Becoming civilized: the process of becoming involved with enlightenment, organization, and concepts of progression.

Enlightenment: the slow process of becoming aware of self, society and the world—each child's becoming aware of his singularity, his own capacities and responsibilities. Because each child is a unique individual, he has the power to approach the wonders of life in a completely different manner from any other living person; yet this can result in conscious knowledge only with an understanding concerning himself and that which surrounds him.

Organization: those patterns within society that function to satisfy the needs of man. Some of these organizations are not tightly arranged or goal-oriented. Many are not acceptable to segments within a society but still present a force that can modify the young.

In some chapters of this book *organization* is referred to in another sense, that of arrangement and selection of content peculiar to a school situation.

Progression: the systematic and logical succession of steps to learning that are prepared to develop the child. This progression has a springlike quality. Its direction is upward, marked by certain stages of independence. Yet the child's mind can progress by recoiling—by plunging back into earlier learning. This definition can be better un-

derstood by picturing a child not as growing steadily upward in height and responsibilities but as moving gradually along a slightly ascending path which he can descend again, if the need arises, to refamiliarize himself with its source. This type of progression is more difficult to recognize; yet it is the one on which the teacher should base her judgments.

Patterns: those practices, beliefs, theories, and philosophies that are the general framework for educating the child.

For some the very use of the term *pattern* brings to mind the assumption of "regimentation" and the so-called evils of past patterns of instruction. Some patterns do have certain negative aspects, but educational patterns that incorporate systems and organization do not necessarily fall into regimented ways. To the author the very word *pattern* suggests *arrangement*, and it would seem that the whole base of education depends upon arrangement of the vast amount of material, both ideas and concrete experiences, into a harmonious whole. Without systematization and organization, the child would find it difficult to develop the judgment and behavior necessary for intelligent evaluation and self-expression, he would often be frustrated in his efforts to solve a problem, and his directionless thoughts and movements would only become more chaotic as he struggled.

A regimented child—and there are perhaps many more in this world than any of us realize—is often kept in the dark concerning why he is doing something; he can see no logical unfolding of concepts. This child, who is consistently taught with a "here and only now" approach, later becomes a victim of his own inadequacies and ineffectiveness. Society has now reached a point where knowledge of self, so necessary for a meaningful life, depends on patterns which develop concepts of the self.

Nature of the child: a child's human heritage provides the mechanism for laying the basic blocks of education. There are two classes of these characteristics, each derived from different sources.

The characteristics classified as the child's *animal heritage* are:

1. Growth from unicellular to multicellular organism.
2. Prehensile hands with fingers that can be touched by the thumb.
3. Motor skill of walking.
4. Perceiving organs for sound, sight, tastes, smells, and feeling.
5. Central nervous system.

6. Needs that compel or drive the organism to seek food, warmth, shelter, movements, and perhaps acceptance.
7. Behavior characteristics—conservativeness, lethargy, suspiciousness of innovations, hesitancy, cooperativeness, random curiosity, imitativeness, habit formation, and fumbling trial-and-error conditioning.

These we have in common with all other animals. But because of its extremely complex brain, the child not only grows and feels but also thinks, while animals have not acquired the behavior of thinking beyond conditioning and sensing. Because the child can think it is possible for him to become civilized.

From the *civilized heritage* the child can receive the following phenomena which make human behavior possible:

1. The thinking tools of language (oral, written, and mechanical).
2. The knowledge of materials and inventions.
3. An awareness of discoveries and problems yet to be solved.

Patterns within society will interact with the animal heritage to make the child a civilized human being in a relatively short time. Collective thought has a direct bearing on the child, those patterns that involve both past and present cultures should have the most beneficial effect.

Primary school: the American school scene has had a mixture of terms applied to various types of organization. Terms such as nursery, playschool, preschool, junior-primary, primary, and kindergarten, for instance, have been used to designate different philosophies and programs, and each term has implied some form of organizational pattern, no matter how flexible or informal. For the sake of facility this book will group the ages 4-8 together under the term *primary school*.

The nomenclature and demarcations of programing in our school systems are often inaccurate and inconsistent. The profession might benefit from some workable grouping plan such as age blocks for the designating of preschool (2-3 years), primary (4-8), and elementary (9-12).

All too often the patterns within these multiple-name programs confuse the general public. Actually, the confusion lies in the patterns, not the names, but there is always the hope that if we change

the titles we may clear the air of present confusion and facilitate understanding.

Experience: the personal knowledge a child derives from his actions, practices, or perception of an activity. In the narrow sense in which it is sometimes employed the term refers to designed projects that supply the child with material from which to draw personal perceptions.

Level: this term embodies the idea of a progressive change on an upward scale of behavior or insight.

Treatment: the aggregation of experiences, approaches, and techniques that are brought to bear on content material in the primary curriculum.

Foundational treatment: that form of treatment which when applied to content material establishes verbal mental sureness of the content but does not insure mastery or habit.

Impressional treatment: that form of treatment which when applied to content material and experiences causes awareness and awakens the child to the existence of such material.

Skill treatment: that form of treatment which when applied to content material fixes a fact or knowledge. Skill encompasses understanding, overlearning, practice, mastery, and habit.

Concept: the mental image of a thing formed by generalizations from particulars; an abstraction which results from the construction and reconstruction of many related experiences into a sum total.

Systematic pattern: a coordinated plan of procedure that can be repeated, identified, and evaluated. It incorporates methods, activities, experiences, and material systems.

Curriculum Patterns

Curriculum guides, like psychological theories, are as plentiful as the flies on the tailor's bread. Many have been tagged by anxious writers with such terms as "activity approach," "experience unit approach," "skill foundation," "developmental approach," "child development," "problems of living," "broad fields," and "social adjustment." Quite often these programs produce the result desired under the leadership of skilled teachers. The true results of any single theory cannot be measured accurately because of the borrowing, overlapping, and cross-fertilization of patterns. No one as yet has

found it feasible or possible to formulate a program that can be followed successfully without modification. Modification and the acknowledgment that modification takes place are essential to avoid falsifying the results or major goals of the curriculum guidelines.

Professional education is overrun with names that have been applied to patterns and systems. Students and teachers occasionally have the urge to attach a title to a pronouncement; yet, under close scrutiny, the named system may not embrace the idea attributed to it. The same thing can be said about placing three or four patterns into study units; there is always the danger of misfitting and overgeneralizing. Even with this danger it can benefit our study to organize under related headings certain marriageable parts which may not have sprung from the original concept of the pattern but which practice has placed in one of four categories.

So, like psychology with its structuralism, functionalism, behaviorism, and topologicalism, young-child education gives names for curriculum patterns. Three identifiable patterns of curriculum guides exist in today's schools, and to these three forms each teacher gives her unique modification—which in practice becomes a fourth form, which we might label the *multifused*. The three forms, *socialization*, *developmental*, and *instructional*, contribute the running themes that carry primary children through the educational years of 4 through 8.

Socialization Pattern

The socialization theory of instruction directs its energy toward a personal conduct curriculum. Its major aim is to make the child an acceptable part of his environment. It attempts to adjust, develop, and change the young child into a cooperative, expressive, and highly independent organism.

This pattern has given the primary school such occupations as the tell-time period—a daily routine period permitting children to discuss their experiences and toys. This practice has given meaning to the teacher-pupil relationship that a democratic society demands. But a few inherent evils, such as the inescapable fact that often tell-time topics are not worthy of school time, must be recognized and dealt with.

Exponents of the socialization program advocate large blocks of time in the school day for free choice of various types of concrete activities that may develop into a project. This flexible free play

period, as it is often called, is kept under a minimum of teacher direction so that the resources present in the classroom determine the pupils' occupations. Through this daily block of time the child is encouraged to socialize with the person or persons he chooses.

The teacher emphasizes folk songs, original ballads, and loosely organized games in short periods of music and motor activity instruction. The songs most often selected are those found in the child's present cultural life, and the child's right to select these songs is respected.

The socialization pattern grew upward from the infant and pre-school movement, and now some of its functions and practices can be discovered at every primary grade level. Primary education, under the guideline of socialization, is a personal and interpreting process of present-day experiences. A conscious attempt is made to apply or direct the appropriate learning situation for the specific problem at hand. Those who follow this pattern often say that the successful adjustment of the individual must be established before "formal" school instruction is given.

Socialization's organized patterns fade out in progressing through the primary grades because of the demand to instruct the young in established content areas. The philosophy of this pattern is not forgotten, however, and the choice of certain units, topics, and techniques of handling material are governed by the belief that the child's interest will motivate and provide ease in learning.

The application of the socialization concept in the upper level of curriculum is exemplified by the use of such topics as cowboys, Indians, and circuses for unit development. Drill devices that are introduced represent accepted child-interest forms—a television set built by pupils is used for reading chart stories; children draw murals to culminate a topic; and sociometrics are used to determine friendships and isolates. All these and many other practices exist in schools because the logic of the socialization pattern is based on the child's here-and-now awareness.

Some highlights of the socialization pattern are:

1. Give each child all the information which he craves and which he is able to assimilate.
2. Give the child many social experiences to which he may adjust.
3. Recognize that the child learns more easily through *doing* than through *words*.

4. Recognize that the child should learn responsibility through sharing, directing, leading, and following.

If it is at all possible to generalize concerning the theoretical application of a philosophy, we might say that teachers who follow the socialization theme believe that the social side of the child is the very keystone of his growth and development. They start with the children's own interests, needs, and concerns and proceed to introduce him through his selected interests into the fraternity of man. When the child shows signs of antisocial behavior, he then comes under the scrutiny of home, school, peer, and neighborhood analysis.

A number of basic concepts underlie this curriculum approach: (1) on-the-spot decision and planning, (2) exploration of children's interests, (3) emerging, day-by-day, living curriculum, (4) learning center functioning in a permissive atmosphere, (5) flexibility, and (6) necessity for group interaction.

Developmental Pattern

If we can say that the socialization pattern mainly treats of the present aspect of civilization, it would be safe to state that the developmental pattern then introduces past along with current time dimensions. Developmentalists have been quick to condemn earlier practices and point out the incongruity of certain school expectations. In the developmental pattern the concepts of interrelatedness, maturation, and readiness have been difficult to organize and put into effective practice without making some overgeneralization that nullifies proper application. Interpreting human behavior is a complicated process requiring valid and reliable measurements; educators must be wary of accepting views expressed by isolated and nonrepeated developmental studies. Unless a school provides accurate tools (reliable scales, tests, and audiometers) and well-trained specialists to use and interpret complicated grids and forms, it may well be wasting time and efforts.

The word *development* also has been used by many writers with many meanings. Writers apply the term to describe a systematic method that is designed to unfold a content area in an orderly step-by-step or level-by-level arrangement: developmental reading, developmental tasks in physical education, developmental writing. This term may be used to refer to the logical or historical evolution of

material and defined as a stage of the development. In another use, *developmental* defines the performance level and achievement goal of an age and places certain tasks and materials at that age or grade level. The variety of meanings and applications of the term have caused many persons to overinterpret and overextend the use of the pattern.

However, the word *developmental* is replacing the term *grade placement* once popular in literature and is becoming an explanation for the reshuffling common in curriculum design. *Growth* and *development* are being used together so frequently in magazines and journals that the hasty reader tends to make them synonymous. In proper definition, developmental patterns are levels of experiences that permit growth to proceed at its normal rate and direction.

The developmental concept for curriculum guidance projects the feeling that this pattern is based on scientific observations and experiments. Using the term *maturation* as a pivot point, the developmentalists weld physical, social, emotional, and mental development into a comprehensive program. "The child as a whole" is their theme song, and with various calendar charts the teacher may discover her pupils have a number of ages. The height age, weight age, dental age, carpal age, grip age, mental age, and reading age are sautéed over a Wetzel grid to give the worker an organismic age. By deemphasizing traditional marking systems and placing direct study on a sociometric, maturational index, developmentalists aim to make adjusted children of all children.

Max Wertheimer's original work with the Gestalt psychological system gave rise to the whole-child movement, and integrated behavior has become all important for practicing developmentalists. Simple equations such as $\text{maturation} \times \text{nurture} = \text{development}$ and $\text{maturation} \times \text{experience} = \text{achievement}$ dramatize the relationship between curriculum patterns and development. The developmentalists view the child as an individual who in action is a variable learner, and who is a composite of his growth potential and a great number of his varied and continual experiences.

Research following Gestalt psychology has recorded many studies that point to concepts and practices used in the developmental plan. The tendency to self-regulation, uniformity of sequences, variations in rate, whole-to-part coordination, and aspirational and anxiety levels become the major concern of the teacher. Activities of the daily

schedule are designed to encompass "level" concepts of motor sequences, inner urges, child interests, and a matrix interaction of nurture-nature factors. The curriculum occupations provided by developmentalist schools and teachers offer a wide range of material at each grade level. Re-examination of objectives is a fundamental part of daily experiences. The slow learner and the exceptional child have no doubt been helped by the comprehensive studies that have been directed toward the developmental picture. This type of program speaks of stimulating the child and the dangers of overstimulation. Centers of learning such as interest, problems of living, place, idea, and people, replace discussion of subject material. The program lays heavy emphasis on the child at his stage of growth and focuses upon "real life" situations for training. These centers designed for individual growth are "whatever a teacher and class can get their hands on and their minds around to enrich the quality of classroom living." "Visualizing in the center the qualities that make it worthwhile determine its usefulness."¹

The specific contributions of the developmental theory have adhered to existing patterns, and few teachers or parents realize their existence. "The whole child" has become such a trite expression that application of its basic principles is often lost in the emotion of defense. It is regrettable that many developmentalists and socializationists seem at odds with instructionalists over the problems of content and construction. Meaningful learning involves selection, attention, experiences, evaluation, and organization. All education is an organized attempt to give the child a understanding of the meaning of self, society, and life. The nature of the material to be understood as well as the nature of the child and the instructional media comprise the triad of meaning.²

Instructional Pattern

The third plan of curriculum organization is the instructional pattern, which is guided by the view that the social and physical growth of the child proceeds best from a curriculum that considers content by sequence, scope, and value. Content is defined as the ideas, activities, and materials that are given to the child which, when as-

¹ Virgil Herrick *et al.*, *The Elementary School*, Prentice-Hall, 1956, p. iii.

² Ernest Horn, *Methods of Instruction in the Social Studies*, Scribner, 1937, pp. 122-150. A classic presentation of meaningful learning.

simulated, distinguish man from other animals. Thus, the four concerns of instructionalists are language facility, and mental dexterity along with skilled use of prehensile hands and moral responsibility.

Instructionalists feel that the particular function of the school is to provide the experience related to man in a distilled, organized, and systematic form. They stress knowledge in a central core of skill tasks, emphasizing language because it is the vehicle or mental tool for communicating selected ideas. The instructionalists do not under-rate the social, motor, and emotional aspects of growth. They would not, however, allow any of these factors to destroy the system of content that is basic to much material.

The social side of the child operates in a field of language, gestures, and operational acts. These become the tools that instructionalists desire to develop in order for the social process to operate. Two planes of references are kept in mind when planning curricular content: the nature of the child and the nature of the material. One should not be altered to fit the other without reflective thought. There may be as much danger in altering the material to fit the child as there is in altering the child to fit the material.

Instructionalists are often classified as the subject-orientated group and are condemned when they expose the 4-, 5-, and 6-year-old curricula to a content structure. In reverse, the traditional first-, second-, and third-grade program has been leaning in recent years to a more instructionalist point of view. The readiness program has caused certain material to be considered as suitable for 4-, 5-, and 6-year-old groups. The unit form of content organization has invaded the nursery school, and throughout the grades following, it will be noted, a sequence of material is as important as the scope that is offered in each study unit. Areas of language arts, numbers, social studies, art, and music receive the donkey's load of emphasis. Single textbook teaching is discouraged. Tight schedules and standard content come under the scrutiny of researchers in an attempt to determine the most efficient forms to be accepted. Instructionalists note that extensive reading is more effective than intensive reading, that schedules exist in all programs, and that patterns and flexibility or large blocks of time may be imposed on any design. Standard content in some areas and skills are exactly what society is demanding its schools to impart, for example, the recent stress of public opinion on more and better mathematical and scientific education.

The instructional pattern is an organized curriculum that introduces the child to tools, tool-made products, and ways of using tools and tool-made products. *Tools* are defined as acquired forms of procedure and behavior. The term may be subdivided into mental and tangible forms. Writing, arithmetic, speaking, listening, and countless other procedures are mental tools, while tangible tools are those materials, implements, appliances, and utensils that have been produced and invented by man. Making the child aware of these different tools and enabling him to become proficient in their use is a requirement of present-day life.

Unfortunately, both types of tools have been developed so rapidly that the young child can never really learn all of them. Many adults only know how to operate some mental and tangible tools and never completely understand them. For example, few people understand the television tube, but everyone has learned to turn a television set on and off and adjust it successfully. This accumulation of tools and the skills necessary for their use makes it imperative for the school to prevent the waste of the child's time in fumble-learning. An instructional pattern directs its objectives to now-and-tomorrow needs.

Multifused Pattern

These three curriculum patterns, socializational, developmental, and instructional, are the mainstreams for primary grade curriculum construction. If any of these three models existed in pure form, one would soon identify a part or element that was characteristic of another as well.

Many teachers do not take time to identify which pattern they are mainly following. Sometimes after reading a provocative article or listening to an articulate speaker at a convention, a teacher becomes perplexed. Frustrated and enticed by new and exploratory approaches, she rationalizes that her pattern is a patchwork quilt containing the best and prettiest of all. Taking a phrase or activity here, adding a dash of what was heard from another teacher, the classroom designer is, in fact, developing a new pattern—a multifused one. Through this process of combining and interlacing, the various elements become so consolidated that in practice the activities and experiences provided for primary children become fused into a single pattern.

The distinctive characteristic of this multifused pattern is that no

school or teacher has the same core experiences as any other. The individual modifications are made to satisfy personal circumstances, community values, interests of school administrators, and other pressing needs.

The fused pattern is never truly constant enough for analysis; it changes within grades, teachers, administrators, and communities. The major concern of the profession is to make teachers aware of the existence of such a pattern so that they can identify and understand the source of the parts and evaluate the methods they have selected.

Teachers turn to the multifused pattern out of fear of following a cult, and quite often make statements to the effect that patterns are only a means to an end. Vitality, significance, and the wonder of a poet must be embodied in any successful teaching pattern.

As it seems apparent that there are at least four identifiable patterns existing for application in the primary grades, the selection of the basic approach to be emphasized should be the cooperative task of the administrator, teacher, and school board. When this important decision has been reached the teacher can know how best to tread the path she is to follow. Certain basic factors will then come to the fore that need the closest attention of the teacher since they relate directly to the experiences and materials she will provide for her pupils: material unit organization, pertinent knowledge of student abilities, treatment to be given specific aspects of the content, conditions necessary for learning, and sequence in the primary grades.

Suppose for ease of understanding a teacher takes these ordinal steps to organize her entire curricular pattern.

Step 1. Discover the basic pattern the school desires to follow through discussion with her immediate superior or administrator and study of the published local school curriculum guides. Establish and accept this pattern so that individual modification will not alter the direction of the entire program.

Step 2. Make as accurate a sociomental analysis of the group to be given instruction as possible. This step includes discovering the community make-up and interests and the present felt and real needs of the students and parents. Ascertain as soon as possible the general abilities of each pupil; conclusions are less reliable for primary grades than at the later elementary levels. Take into account that each level or grade in the primary program includes a vast range of potentialities and achievement.

Step 3. Identify the material and experiences that are considered valuable for the grade level. It is at this step that basic philosophical beliefs come into play. If the teacher incorporates just the three basic rights of health, happiness, and self-expression, the program may become child-centered. If, on the other hand, she incorporates the fourth right, the right to become civilized, this step takes on wider dimensions. The mental and tangible tools selected are then aimed at satisfying the needs of intelligent citizenship.

The grades or levels in the primary school must be coordinated in order to create a sequence for the curricular content. The logical sequence of the material, the difficulty of the material, and the pertinency of experiences will be three important aspects of the overall design.

Step 4. Determine as a teacher which type of treatment will be necessary for the content to be covered in the given grade. Three forms of treatment—foundational, impressional, and skill—are advisable for material at the primary level. A discussion of these treatments will follow this section.

Step 5. Constantly keep in the foreground the psychological conditions necessary for learning. Conditions that govern methods and techniques include motivation, intensive reading, extensive reading, teacher-pupil planning, group learning, emotional and initial set, laws of forgetting, empathy, and field atmosphere. A good description may be obtained from many educational psychology books.³

Step 6. Organize and arrange the content material into the unit plan best suited to the group and the material. This unit organization will contain basic parts such as pretests, introductory lessons, multi-instructional media, the built-in system of material, range of material, and evaluation plans. Illustrative teaching units may be found throughout the present book.

As teachers acquaint themselves with the ingredients of these six steps, the pattern for early childhood education takes functional form. The steps dealing with treatments and unit organization are the most elusive, and each teacher should be certain that she clearly understands the features of both if her teaching is to be meaningful.

³ See James B. Stroud, *Psychology in Education*, Longmans, Green, 1954. This book is recommended for purely personal reasons; the author was fortunate in having Dr. Stroud for a professor and still finds food for thought between the lines as well as in them.

Types of Treatment

Step 4 of the curriculum organization plan introduced the term *treatment*. Treatment is the management or handling of content material. There seem to be three discernible forms of treatment that can be given to primary grade content: foundational, impressional, and skill. We will give only general definitions here, because the subject of treatment is discussed extensively in Part II.

Foundational treatment is more organized and directed than is impressional treatment. Basic words, knowledges, processes, and systems are *presented*, and children are given specific meanings for words that in the future will be essential for skill treatment.

Material that is given foundational treatment has gone beyond the feeling stage and gives the child enough experience to express the ideas in words and thoughts. The child can verbalize and identify the problem and realize that time and extension of experience will be necessary for fulfillment of the solution.

Impressional treatment of content gives the child a feeling or an attitude toward material or planned experiences. The child can be said to be initiated into certain activities or ideas. This feeling is derived from empathic methods and is directed by very general experiences. The material treated by the impressional approach never becomes a fixed idea or definable in exact verbal form. For example, a teacher conveys to the child the idea that he is accepted, yet it is not possible to isolate the experiences that impress this on his understanding. Encouraging a child to look at a variety of picture books is an impressional act and is fitted into preschool and kindergarten activities because adults recognize the value of early experiences with many types of books. A great many of the experiences provided for the 4- and 5-year-old should be given impressional treatment. In fact, some of the material now receiving foundational treatment would be better handled by the impressional approach.

Skill treatment is a step further than either foundational or impressional treatment. This treatment results in a *practiced reaction*. The ability to recall at will and respond habitually or reflectively is the aim of skill treatment. Much that we offer to children at the primary level will become ingrained with multiple exposure, but seldom can this be completed in the short years of primary educa-

tion. All too often adults assume that adult accomplishment can be assimilated by the young with single exposures.

Material given skill treatment is definite, fixed, and overlearned. Listening, following directions, and the syndrome of operational acts are major tools that should be taught and overlearned in the primary grades. The degree to which the child has mastered these skills will depend on the nature of both the child and the instructional program.

Teachers must understand content material thoroughly in order to treat it with the form it demands. Spelling, for example, cannot be treated by the impressional approach and establish the foundation necessary for success in future work. Teachers must also be prepared to determine the parts of each area of the curriculum which require different forms of treatment. For instance, at the second- and third-grade level, holiday concepts will be given foundational treatment, while at the preschool and kindergarten level this information will be impressional.

Kindergarten teachers cannot ignore the fundamental aspects of subject content even though little formal reference is made to it in the 4- and 5-year-old classes. It is amazing how many misconceptions result from incidental impressional treatment in early grades. A teacher who reads for an inquiring child the number 21 as 2 and 1 is laying impressions that make subsequent foundational work in place value difficult.

Unit Organization

Unit organization is the last step in an educational program; it includes the components of the material as it is presented to the individual and the class.

A unit can be defined as those activities, experiences, and learnings which are presented around a central topic, problem, or theme to a group or class of students. However, not every part of the daily schedule is organized on the unit plan; a great many primary teachers attempt to group as many parts of the curriculum as possible around the topic of the week. Sometimes this correlation is detrimental to meaningful unit concepts, and areas like music, reading, physical education, and art may never really receive the unifying unit handling which is needed.

Some of the confusion concerning unit organization has been due

to the many names given to units. Educational publications contain references to resource and commercial units; activity, project, basal or core, and subject-matter units; functional, survey, experience, and concept units; and grade and teaching units. The time has come for a unit name to unify all of these units and take its place at the head of this terminology parade. It may be sensible to consider the name *teaching unit* as the collective title of all these terms, since in the last analysis the teacher, student, and school are interested in the actual class situation.

Some educators, as reported by writers in the field, have been responsible for stressing "doing" for learning's sake. The mesmeric phrase "learning by doing" can cloud the entire area of classroom organization, unit plans, and methods for instruction. Teachers are at sea trying to discover if a "project unit" is the same as a "center of interest" unit. Time, temper, learning, and money are lost if we keep insisting that today's primary teacher must be so flexible in her teaching plans that any reasonable name for unit organization will suffice or that she is free to assume that incidental experiences are as predictable and worthy as planned significant unit learnings. Teachers should know what they mean by a unit and what properties constitute the defined unit arrangement.

A teaching unit contains for minimal success certain properties that should be utilized in varying degrees and depths according to the treatment decreed for the unit. Each unit may not incorporate all of these properties, but an effective organization will not exclude many: (1) pretest, (2) motivational introductory lessons which often appear in a problem setting, (3) material system, (4) range of content, (5) audiovisual aids, (6) field involvement, and (7) evaluation and future direction.

From the standpoint of economical learning, more teaching units should contain pretests than now commonly do. Many teachers find themselves teaching unit content which is already known by the children. One of the most evident gross errors, perhaps, may be seen in teaching colors to children *en masse* at the kindergarten level without first establishing through a pretest whether the knowledge is already rooted in the children's minds. At the first grade some reading methods instruct the child in how to make the sounds of the language, when observation will reveal that he has already over-learned them and needs other approaches.

In the task of considering unit content organization the planner will need to examine both the system of material and range of material. Some content, such as numbers and reading, has a built-in system that will govern its placement in a unit. Counting cannot be left to chance or later-grade skill learning if the child is to be given meaningful content concerning numbers. The range of material presented at each age level is important when we consider group teaching. A school may set a minimum point it desires a kindergarten child to attain in counting before he leaves the year's work, but this should not keep a teacher from impressing those children who have gone beyond this minimum point with the possibilities of counting by 5s or 10s. Every primary teacher must dispel the existing myth that there is a content limit to be reached at each grade level. Every primary level has a wide range of student ability and an overlap between achievement and abilities that can only be handled effectively by presenting material with range perspectives at all levels.

If the teacher concentrates on the properties that constitute a unit, she should not find herself frustrated because this or that material is not available at her school. Wading through the long preamble on objectives that is given in commercial and resource units, the average reader never gets far enough to find out what is actually taught or suggested for planning. It does not take any great professional training to discover the goals, objectives, and needs that are to be met in any teaching unit by just reading the unit content. All units will include in their general objectives the modification of individual behavior; the detailed introductory listing of all the good reasons for going to the trouble of teaching the unit only takes time and energy away from finding and organizing the teaching material.

Writing units is a tiring and time-consuming task and the teacher's tendency, when a little experience has been gained, is to eliminate as much unit writing as possible. This tendency limits the actual fulfillment of unit plans and goals, however, and even the long experienced teacher discovers that writing unit plans is a key to systematic instruction. Often units are written and planned for flexibility—flexibility of using or not using certain listed and collected materials. *Units should not be planned and written to include flexibility. They should be taught with flexibility.* The written plans should show a balanced arrangement of experiences that will give depth, sequence,

and problems to the material unified. Flexibility is commonly the cover-up word for poor units that show little depth, sequence, or problems for solution.

The question of what is a good or a significant unit is not one that the classroom teacher can decide independently; she has her hands full being sure she has developed pupil ownership in the units that will contribute to understanding civilization. Where there is too much local selection and class determination of the topics for study, there is often also too heavy an emphasis on the "here and now" interest criteria, whereas primary-grade material should always be arranged to furnish continuing steps in the presentation of tools and content. No grade should consider itself entirely self-contained; if each level makes reference to what has gone before and what is to come, it will insure the child's progress in basic understanding.

Summary

Young-child education appears to follow in more or less definite patterns in relationship to curriculum building. Three identifiable patterns are the *socialization*, *developmental*, and *instructional*. To these today's teacher has added a fourth, the *multifused*, which is a modification of one or more of the former. The multifused program is more difficult to recognize since no two schools or teachers will use the same basic core.

No matter which of the four general forms of curriculum construction is favored, the content to be presented to the primary child may receive *foundational*, *impressional*, or *skill treatment*. Foundational treatment gives the child enough experience to express the ideas presented to him in words and thoughts, although he still does not have the ability to grasp the complete concept. Impressional treatment endeavors to give the child a feeling or an attitude toward material. Skill treatment results in a practiced reaction, the ability to recall at will and respond habitually or reflectively. Listening, following directions, and a number of operational acts are major tools that should be handled with skill treatment since proficiency in these areas is necessary for success in any others.

Unit instruction should be guided by pretesting in the area to be studied. Other properties of unit organization, such as the system

and the range of the material, are important. There should be no limitation on the learning point to be reached at any grade level. Primary-grade material should be distributed over a general plan ranging in continuing steps from the lowest grade level to the highest—no grade is contained within itself, but is instead a part of the whole sequence.

Play

Even the most cursory reference to childhood brings to mind one of its most basic characteristics, that of play. Poets praise it, philosophers study it, and psychologists and mental hygienists analyze its merits. What is this activity that is the root of childhood? What should we know about it? What can be accomplished with it in the curriculum for the young child?

The artifacts of play have been found in excavations of the ruins of Egypt and Babylonia. The early Chinese, Korean, Peruvian, and Aztec civilizations have left traces of play in children's toys and crude sculptures depicting boating, hunting, and festive scenes. Play, therefore, appears to have held a prominent place in past cultures, but in spite of its age and universality, real understanding of it is often shrouded in confusion.

With its various meanings, play is like a yoyo in which a child delights: it is fascinating as a toy and satisfying as an activity. Play, then, may be viewed as an activity, an attitude toward an occupation, the antithesis of work, and recreation. The concept it implies defies precise definition, but because of its persistent nature it is important for teachers to gain some insight into it.

Explanations of Play

Surplus Energy

J. C. F. von Schiller conceived of play as the aimless expenditure of exuberant energy,¹ supplying the basis for one of the most common and persistent explanations of play.

¹ Friedrich Schiller, *Essays, Aesthetical and Philosophical*, Bell, 1875.

Edouard Claparède refined the surplus energy and preparatory definitions of play and maintained that play was a safety valve for pent-up emotions. This belief was substantiated by reference to the glandular secretions made by the body during periods of stress and strain.

Herbert Spencer favored a view that children had extra energy which they dispersed in random and aimless activity, and expanded this theory into a more definite philosophy by carrying it over into adult life. Spencer explained play as partly superfluous, the instinctive result of the absence of real action or activity performed for the immediate gratification derived without regard for ulterior benefits. Crying, fighting, and body movement were presented in this manner and named the catharsis theory. Actually this suggestion may be best understood by children who cannot explain what the feeling of mud squeezing through the toes means but nevertheless find it exhilarating.

Preparation

Plato in the *Laws* prescribed an education for children in learning to play at the occupations in which they would be engaged as they grew up—in reality, preparation for life.

In his book *The Play of Animals*, Karl Groos said that play is instinctive practice, without serious intent, of activities and tendencies that later will be essential to life.² These observations made on lower animal life have been interpreted to mean that as the organism became more complex play filled an instinctive need for guidance in development, thereby becoming a method of education.

L. E. Appleton substantiated this view from her observations of savages, maintaining that play is a preparatory activity for physical growth.

Recapitulation

G. Stanley Hall explained play as the motor habits and spirit of the past of the race persisting in the present in rudimentary form. This version became a part of the recapitulation theory, which held that children went through the cultural periods of the race in their own individual development.

² Karl Groos, *The Play of Animals*, Appleton, 1898.

Self-Expression

Collaborators Elmer Mitchell and Bernard Mason see all activity as fundamental to life.³ According to them activities result from the physiological and anatomical structure of the organism predisposing it to certain lines of action. The activity of play, therefore, is self-expression in order that life may exist; hence play encompasses the role, social contacts, habits, universal wishes, and compensatory aspects of behavior.

Activity is the primary need of life. In the satisfaction of this need each person engages in some form of play. To account for the various forms of play pursued these authors offer three factors. First, they suggest that the physiological and anatomical structure of the organism predisposes it to certain lines of activity. Secondly, they maintain that the physical fitness of the organism has an effect upon the type of activity it engages in, while they cite as the third factor the psychological inclinations of the individual which guide him toward certain types of activity.

Experience

The multiple implications of the term *play* leave the educator with many conjectures about its use, much less its definition. Rather than tackle this dual problem, we often rush to provide blocks of time and numerous types of material with which the child may exercise his ability to play. In fact, one of our greatest self-criticisms of our teaching relationship with the young child might be that after we have furnished him with the opportunity and objects to satisfy this intuitive urge, we sit back and expect him to play—and with results highly satisfactory to us as adults!

It remains then to form a usable definition that will guide the teacher and parent to offer the child activities and materials producing constructive and civilized play. In so doing we have the assurance that at any time in the future we may change positions if the outline proposed by our definition proves unproductive.

We may suggest, then, that play is a pattern of activity, even though the pattern is a changing one, which produces rewards of

³ See Elmer D. Mitchell and Bernard S. Mason, *The Theory of Play*, Barnes, 1937. This book offers an excellent and brief summary of the various explanations of play.

enjoyment or of occupation; in brief, play for the child is what work is for the adult. If we can agree to that we can see the differences between the two as *experiences* (or *levels of experience*). In accepting the hypothesis that play is a changing pattern, we must note that play becomes an abstraction which signifies at the low level any activity engaged in and at a higher level more selective activities; at the highest level of abstraction, it diverges into two distinct meanings, *play* and *work*, more or less related.

The idea the child has of play as he matures is colored by the interpretation given to it by adults. A narrow definition for play at the young child's experience level might understandably be an activity which occupies time, is enjoyable, and satisfies the functions of the organs. To go to children themselves for the answer is illuminating. If we should ask, "What is play?" we would not be surprised to have answers such as, "Play is what you are doing when you climb a tree," "You think what you are doing when you draw a picture and that is play," or "The children jumping rope are playing."

No matter how we attempt to define it we will all agree that children bring to their play the energy and absorption that adults bring to their work. To a child play is work requiring all the qualities which in later years he will transfer to his means of livelihood. Play for him, like work for the adult, may be more or less satisfying and successful depending upon the circumstances surrounding it. Play is therefore serious business for the child and warrants the serious appraisal of the adult.

Fields of Play

Before a discussion of play is attempted the writer feels that a distinction between two separate fields of play must be made. A superficial perusal of the subject would lead us to assume that there is unrestricted and restricted play. To be accurate, however, there can be no unrestricted play in the human because civilization in any degree places bonds upon the activities of the individual. There can exist only restricted play outside the purely theoretical area.

We bring up the subject of unrestricted play, though it does not and cannot exist, in order to clarify in our own minds what the educator means when he talks about *free play*. This term means the situation in which the child may indulge in any of a certain number

of activities which are provided for him at that particular moment. He may follow any one of several avenues which are permitted him. The degree to which his play is restricted depends upon the situation in which he finds himself; if he is born into a primitive society he may have more selective forms of restricted play opportunities than if he is born into a highly civilized culture.

It is because of the confusion which surrounds the term *free play* that the author prefers to call this type of activity *liberty play*. The child may exercise liberty in the choice of an activity as long as he assumes the responsibility which liberty implies—consideration of the individuals he is among and the situation he is in. This universally restricted field of play offers to the educator a fertile ground for guiding the child, through either his liberty play experiences or his organized play experiences.

Types of Play

However, before the school can plan efficient use of the child's play abilities, it must understand and accept four rather definite types of play which will be evident among its pupils. Random play, imitative play, imaginative play, and reflective play all provide satisfying and maturing experiences for the child. They will occur in varying degrees in different children but will be found at some time in all children. Teachers should recognize their manifestations readily and understand their contributions to the child's growth.

Random play may be observed, for example, when a child passes from kicking a stone to picking it up to hurling it toward a tree. No mental force drives the child into random play—only the expressive power of the body reacting to an object which by chance appears on the scene. There is neither good nor bad in random play. It requires description only when there are consequences of the random action. For instance, suppose that the child in throwing the stone hits a window instead of a tree. The play experience would then take on consequences which would set up a problem which, in turn, would provide educative possibilities.

Imitative play is the type that makes the child the actor in his world. His characters are patterned after those in his immediate surroundings. He senses the patterns and copies them, but all the while gives them the touch of his own unique composition. The adult

watching these play episodes must provide a variety of persons for the child to imitate and, thereby, enlarge the scope for imitative civilized behavior.

Imaginative play activities are those the child develops from the imitative acts he has fixed, those with which he delves into the world of make-believe and magic. A child who has acquired the art of rope jumping and a few rhymes to accompany the rhythm, for instance, may use imaginative play to create his own verbal nonsense:

Over, under,
Munder, sunder,
Give me a chance
To jump and plunder.

Or two little girls may begin a series of clay cupcakes and soon progress, as they yield to the satisfaction of rolling pellets of varicolored clay, to forming building blocks and on to candy pills for their dolls, occasionally reverting to the original cake making—the whole series of smooth, casual steps, devoid of any conscious planning, is deep in imaginative play.

Reflective play is often confused with shyness by the socially orientated adult. Frequently a child will play on the outside of play situations involving others. He may not always want to become a participating member. He may want simply to watch the events or, perhaps, to reshuffle his sense perceptions. An overdose of such play may develop “wall-flower” peculiarities, but to assume that all quiet reflective play is either unimportant or dangerous is to destroy a valuable avenue for mental growth. Reflective play is activity willed by the child, an occupation that requires mental involvement and control.

These four types of play occur through the family, school, and community structures with varying degrees of liberty. To recognize them and understand their significance in the child's life is to strengthen the bond between the child and the adult, with the result of better and earlier education.

Educational Games and Devices

Today's schools make effective use of the game-play approach to many of the educational tasks confronting the young child. The American school invented the spelling bee, which added both pleas-

urable and tense moments to the learning class for the group as well as individuals. Teachers, publishers, and manufacturers have become so inventive in this area that the main concern is one of the best possible selection and use for the primary classroom. We will discuss play equipment more specifically in the following pages, but the reader might find it useful to consider some general criteria first.

The game should be a teaching device, and should have as its purpose a specific type of development. It should provide enough content experiences for each player to justify the time spent playing it, and should hold the active attention of all the players. Games should be replaced as soon as the interest in the activity slackens. Some means should be provided for the teacher or the players to check performance during and at the end of the playing time.

The activity should be self-motivating and usually within the experience of the child, but on some occasions should be a test of power beyond the usual content experience. It should include a definite goal to be reached by an individual or a group, the attainment of which ends the game. In some cases, the basis of the game should be chance rather than ability, so that all children may have an opportunity to win.

Some games should provide opportunities for children of varying abilities to play together, and all should encourage a spirit of helpfulness and fair play between the participants and an attitude of respect for individuals and their abilities.

Occasionally it proves worth while to block a particular time in the school week which may be tagged "game period." Staggered times for different content games or groups may prove sensible.

Prerequisites for Play: Time, Space, and Playmates

The school as well as the home is responsible for providing certain prerequisites for adequate and satisfactory play. The simplicity of these is so striking that one would almost wonder at their place in this type of discussion, and yet they are often neglected or misused.

Time for play is the one necessity which today is fighting something of a losing battle with other interests. Many educators are suggesting lengthening the school year in order to accommodate the numerous demands of the curriculum. This issue cannot be

solved without lengthy experimental evidence; however, we can be certain that at the primary level one of the pressing problems is the need for time for play.

A *place to play* is the second requirement which has not been given adequate critical attention. The price of land and the diminishing clear areas within our fast-industrializing cities have resulted in insufficient space for children's play. It is vitally important for the community to protect and improve the land the schools now have and develop more effective ways to utilize it for play. In view of this need, school architects should find a fruitful challenge in supplying designs for multiple play levels to increase the present areas.

It may seem quite obvious that *playmates* are provided by the school. However, the ramifications of this need often escape the eye of even the most masterful administrator. Due to operational arrangements, many young children are not being given the opportunity to mingle with and imitate the play of older children. Field trips to fire stations and follow-up classroom time to dramatize the experiences are common, but how often do we hear of a class taking a trip to a neighboring school for the purpose of playing with the children there or comparing group experiences?

Play Equipment

In considering the fourth prerequisite for play we find ourselves involved in an appraisal of *something to play with*, or *equipment*. In this area two factors may be stressed: equipment for progressive levels, and equipment selected in relation to the content subjects of the classroom.

The play equipment for the primary school, both indoor and outdoor, should provide three or four progressive levels of achievement. Skill in its use should be a constant motivating force for the child, not something which can be accomplished in the first play attempt or even in the first year or so of play in the school.

How best may we decide upon the actual items which will produce these desired levels? A sound suggestion would be to study the equipment used by the professional gymnast. There we will find numerous articles and ideas which can be successfully adapted to the young child's abilities. Thoughtful consideration of the prob-

lem will result in an entirely new view of the situation and will stimulate the creation of new and intriguing equipment for the playground. Swings, jungle gyms, and running areas—the standard layout for the primary school—will be joined by hills, ditches, tri-cycles, wagons, paved roller-skate lanes, gardens, picnic spots, balance beams, outdoor stages, climbing trees and walls of varying heights, painted jumping lines, and a host of other examples which will give play areas the scope once provided for the child by rural life.

Commercial manufacturers have developed many interesting and excellent play devices during the last few years, but the local school still determines the play opportunities. The school system which fosters an intelligent and exploratory attitude among its administrators and teachers is the one which is often rewarded by good results at a minimal cost. For example, one teacher capitalized on the simple game of “stepping in holes and breaking mother’s bowls” by painting large white spots from the school door to the playground. As the spots reached further from the door, so also did the distance between the spots increase. Children were delighted with the activity and benefited from kindergarten through the second grade by the jumping and balancing necessary to bridge the gaps.

However, if we are to restrict play equipment to motor development alone we are neglecting a most valuable opportunity to relate the subject material studied in the classroom to the play situation. Indoor and outdoor equipment may contribute greatly to the content of the curriculum and serve as both a motivating force and a measure of achievement in many areas. For instance, several new designs of impressionistic play equipment, which incidentally also aid in motor development, suggest to the child many of the ideas he meets first in the classroom. Pole tepees can be climbed and can add to class projects and discussions. Older primary children, in their study of Indians, can work out their own sand paintings in imitation of the Western Indians if given various colors of sand in the playground sand boxes.

Something to play with is the same thing as something to learn with, and each primary school should provide the variety, range, and amount of play or learning equipment that is feasible under local conditions. The child will learn from each and all of these types of equipment, and it is well occasionally to take stock and de-

termine if we have made provisions for all the child's play and operating needs.

So important does the author feel the contribution of play materials to be that a more detailed discussion is given below, and a listing provided in Appendix 1 that may be used as an annual check list. As school personnel select the equipment, they should keep these criteria in mind:

1. Choose equipment that stimulates self-activity leading the child to industry, ingenuity, and invention.
2. Choose material that is within the child's motor and intellectual capacities.
3. Be certain that the equipment does not violate any principle of beauty or art.
4. Be certain that the equipment is well made and will take long and hard wear or have an equal ratio between cost and life expectancy.
5. Select some equipment for solitary reflective play.

Intellectual Play

Intellectual and sensory play equipment has gone through a great deal of metamorphosis. Comenius, Pestalozzi, and Froebel each had a specific reason for the selection and presentation of their gifts and sensory occupations; yet we seem today to apply the criteria of "cuteness" and "felt interests" in selecting these occupations more often than the standard of whether the items give or fix a mental process. Visual acuity, problem solving, rote number and letter learning, and the development of sound literary and artistic appreciation may result if care is taken to find the material best suited for this type of play. It would be wise if all primary teachers reappraised Montessori's material as well as Froebel's and then modified the items to fit modern needs. Following are some of the items and practices which should be found in schoolrooms.

1. Puzzle boards, sequence boards, number puzzles, and Mother Goose and story puzzles may be either commercially produced or made by the teacher from upson board (pressed sawdust and pulp).
2. Scissors, crayons, paper, paint, and clay play a definite part in the child's development.

3. Sufficient chalkboard space should be provided for the pupils to use as well as for the teacher's demonstrations.

4. Daily experience in listening to, perusing, and reading recreational and reference books, other than textbooks, provides an opportunity to build strong foundations for reading and the acquisition of general or specific information as well as to promote guided flights into the world of fancy.

5. Bulletin boards should be used to present the child with visual problems. Simplicity and attractiveness coupled with definite information or motivation can turn an average learning situation into a superior one. The bulletin board display should be visually precise and present accurate ideas; then colors, textures, and other incidental factors are to be considered. If more teachers realized the value of such displays they would save themselves many hours of cutting, pasting, and stapling mediocre teaching devices.

6. Games, rhymes, and songs have long been used in the primary school and should not lose their rightful place. Good selection is based on out-of-school and permanent value and on mental development.

Equipment for sensory development will be commented on further in a few pages.

Many excellent teachers provide museum-type play equipment for the classroom as specific units are introduced. Such a practice insures valuable reflective play responses. The primary school may encourage the assets of this type of play by providing temporary collections for frequent display. A general display, appealing to the entire student body, is a welcome addition to the main corridor. Room displays, or those which may travel from class to class, are well worth the time and effort necessary to obtain them. The displays may be drawn from a wide area and may range from historical to scientific.

For example, a doll collection composed of old and new dolls, dolls made from sticks, paper, wax, cloth, rubber, and vegetables can emphasize to children the tremendous scope an idea may take in the minds of people. A collection of police badges gathered from various states demonstrates vividly the variety of designs we have employed to identify community helpers. A historical display of textbooks may graphically illustrate to the young the improvement

of texts through the years. An exhibit tracing the evolution of greeting cards, valentines, and a myriad of other items in our rapidly changing world will prove not only enjoyable but also useful to pupils.

It is well for administrators and teachers to be aware of the opportunities offered by their state historical societies, commercial enterprises, and local individuals and organizations. Much of the wealth of material in this area lies unused because it is not known. It is the responsibility of the school to learn about it so that its value may be passed on to children.

Miniature Reproductions

Miniature reproductions are possibly the oldest type of play equipment known. Dolls, play furniture, mud pies and cakes, stick guns, and numerous other examples stimulate the child to rehearse the roles he sees about him. Some types, understandably, allow for greater language development than others; for instance, dolls necessitate make-believe verbalism.

The school should not discourage these materials but should experiment with them more fully. The kindergarten would do well not only to use the doll and house corner but also to add a changing miniature corner offering play experiences with a shoe store, dress shop, drugstore, and garage. The shoe store, for example, requires only a miniature shoe size gauge, a footstool, and several boxes of old shoes to supply the rehearsals with size, number, and style problems.

If house corners are to be included in the kindergarten they should be brought up to date by the addition of an automatic dishwasher, clothes washer, a pressing machine, and a freezer. The school which persists in supplying the standard equipment of 25 years ago is losing valuable curriculum aids.

The first and second grades should have miniature bands, beauty salons, theaters, and restaurants to round out the present play grocery stores and post offices. Third graders may be motivated by model travel agencies, railway stations, airline terminals, scientific laboratories, and radio and television studios.

When used wisely and well, miniature equipment progresses with the broadening of the child's outlook from kindergarten through successive experiences. And contrary to the general assump-

tion, the best equipment is often the simplest in construction. A basic unit which allows for a great range of purposes is one of the best investments of the primary classroom.

Therapeutic Equipment

It has been therapeutic play equipment which has received the most laudatory comment in recent times. However, most of the statements made have been based on individual points of view and empirical studies rather than carefully designed and controlled experiments. However, although we have little concrete evidence of its value, we should not disregard it without further evaluation.

The sand and water table may again earn a place in the primary school as a device through which the child may give vent to his emotions. The punching bag, also, may assist the teacher in directing antisocial behavior into a different stream. In addition, a group procedure using puppets for the modification of unacceptable behavior may have great benefit for the primary child. A further discussion of this will be found in the section devoted to the content given impressional treatment.

Sensory Development

Any discussion of indoor equipment must include a word of caution to the teacher who feels that one painting easel is sufficient for a class of 25 pupils or that adequate practice in paper cutting is given the child during organized construction sessions. Foundations for the child's later ability to write, for instance, are being laid during the primary years, and he deserves ample opportunity to exercise the muscles required for this activity. He deserves, furthermore, to be shown the simplest and most direct manner of employing the basic skills for which he is preparing—for example, how to handle scissors efficiently and quickly. The teacher should remember that many of the skill-developing exercises needed by the primary child are also accomplishing a second purpose, that of intellectual or sensory development.

The primary teacher would do well to keep in the classroom a number of items for use during liberty play periods which will encourage children to experiment with and practice muscular control. Crayons, paint, and chalk are necessities beyond any doubt. Clay modeling, papercraft, and cloth work are fun and very instructive.

The hammers, saws, nails, screws, bolts, and glue of the work table motivate exercise easily. Slipping over into the content area, the abacus, hundred board, large traffic signs, and imaginative teacher-made or commercial puzzles have a definite place in the development of skills.

Aesthetic Appreciation

Reproductions of famous paintings, both traditional and modern, belong in the school room. Pieces of sculpture should be introduced occasionally. Instructors must remind themselves that the young child is inexperienced and does not have much critical ability, and that he is eager and impatient for things to happen. It is the duty of the school to present all beauty, either natural or man-made, in its best light, a process beginning with the structure of the building and its decoration, proceeding through the equipment given the child to use, and ending with the good taste of the teacher's dress and grooming.

Physical Skills

Materials for the development of skills are of great importance in the education of the young. Equipment should be provided for activities that set the body in motion and develop the muscles through exercise. These play experiences should dominate the outdoor play facilities and have a definite, though different, place indoors.

The physical fitness for the kindergarten child should not be left to haphazardly selected materials. At the first of the school year a simple muscular fitness test may be given to show which part of each pupil's body needs particular training. Running, jumping, pulling, climbing, throwing, catching, walking, dancing, lifting, carrying, striking are all specialized muscular skills that require specific equipment for their application, as do the finer movements in modeling, screwing, hammering, sewing, typing, and lacing.

For the fullest use of the outdoor play area, the list below includes not only standard items but suggestions for other more unusual equipment.

1. A pole maze is a labyrinth of small poles arranged over an area of at least 120 square feet that encourages children to play hide and seek and to run through the many avenues.

2. A walking wall is constructed of cement blocks in varying sizes that can be arranged in patterns to represent, for example, a fort, a house, a car, or an airplane.

3. An inclined jumping board approximately 28 inches above a sand or sawdust pit provides invaluable exercise.

4. Wagons, tricycles, scooters, and separate wheels are toys universally used in homes but too seldom in schools because of the area and storage space they require. Chaining these articles to an outside wall is a solution that keeps them always available for school use.

5. Baskets, pails and a great number of boxes as well as a wheelbarrow will provide the lifting and carrying necessary for motor development.

6. Trees supply far greater motivation to climb than does the wood or steel jungle gym. Small trees or well-selected logs arranged with care on the playground and fitted with platforms and ladders offer a natural excuse for climbing.

7. Balancing and jumping lines as well as hopscotch games may be painted on the walks.

8. The jump rope and hoops should always be present, and the teacher should have a systematic approach to train the nonjumper in the skill. In times past the hoop and rolling stick and stilts were excellent toys for young children. The advent of the car has placed a new danger in the way of using such materials, but if the playground is well situated and protected, these skill toys may still be of great value. Several sizes of balls along with a low net and backboard provide the incentive for throwing.

9. In temperate climates sleds and coasting equipment should be used during the winter months. Where there is little or no snow, the new flexible coaster designed for use as a sled but with wheels would suffice.

Operating Equipment

The effectiveness of a primary school curriculum depends largely on the equipment made available for the use of both students and teachers. Above and beyond the equipment needed for the specific purposes discussed above, the teacher must have a supply of articles necessary for the normal operating functions of the day. Those

listed in Appendix 1 have multiple uses and are the staples of the classroom just as flour, salt, and sugar are mainstays in a well-regulated kitchen.

Some of the equipment classified in the lists in Appendix 1 and in the discussion above may have overlapping uses, but each item is included in a particular category for a specific play demand. Yet this should not lead the reader to believe that a given item will not also serve as a valuable aid under another heading. Froebel chose his gifts carefully with an eye toward developing the inherent power he believed each gift contained. Even in this age of wealth and abundance, it is still a worthy objective to attempt to understand all the applications of available equipment, just as we attempt to fathom the full depth of a child's behavior.

For example, the typewriter is suggested as a piece of therapeutic equipment. The typewriter has value, of course, as a device to develop the child's fingers and to help him recognize the forms of letters, yet its use for therapy is beneficial.

A child behaves in some patterns because certain play equipment has been provided in his environment. It is the school's duty to make this environment as rich as possible with many kinds of equipment evoking a wide variety of activities.

Accomplishments of Play

What may the child achieve through the use of random, imitative, imaginative, and reflective play? Could we expect to cover the entire curriculum by programing nothing but playtime? Perhaps so, if we limit our goals to the child's definition of play; that is, if we pledge ourselves to carry our part of the bargain, implied by the assumption that the child's play is his work. However, would it not take an extremely skillful teacher to divorce herself completely from the distinction the more mature person makes between work and play?

We have had this type of plan presented to the school; for example, the Play Way. If such plans could be successful, it would be due to the thorough understanding of the word *play* and the variety of accomplishments that would result from the utmost use of each activity. And important though it is to the development of the child, incidental learning is so irregular and inconsistent that a teacher

directing the child in the paths of civilization would hesitate to use play as the sole method of instruction or even the basis for instruction.

Yet observation of children playing will produce a long list of accomplishments which result from their occupation. Manipulation skills, exploration, trial-and-error reasoning, sensory perception, social adjustment, and discovery of latent potentialities are important contributions to the civilization of the child. It is imperative, then, that the school recognize the value of play and minimize the danger of an attitude underrating its seriousness among the school personnel.

"Fun" in Learning

Teachers and parents alike often raise the question of whether all learning experiences in the primary grades should contain the element of fun. This is a question that embodies a principle of a particular school of psychology, a common felt cultural need, and a "hidden persuader" element. Because there is a distinction between play and fun, we will take up the subject briefly.

Mark Twain named his period the Gilded Age, and if such nomenclature means anything to the historian the last decade or so will be dubbed Fun Age. Children are encouraged through that mass communication box, television, to think of Sunday as Funday because of the cartoons filmed for pleasure. Parents buy books for children entitled *Fun with Chemistry*, *Fun with Books*, or *Fun While Sick*. Units are taught under titles like *Fun with Words*, *Fun with Machines*, and *Learning Is Fun*. Textbook, workbook, and trade materials are called *Fun with Arithmetic*, *Fun with Letters*, or *Fun with Counting*. The indulgence of the word *fun* has developed the belief that if children or even adults "have fun," "will learn" will follow, when often quite the reverse might be true—neither does the child or the adult have fun, nor does he learn.

The concept *fun* can be used unjustifiably as a hidden persuader to entice the unguarded into doing a necessary and important task. When *fun* is used to explain the pleasure one can obtain from any purposeful learning experience, it is acceptable. But learning is not something that can be fixed by inserting the element of fun. Fun is a word dealing with emotions and feelings, and feeling, both pleas-

urable and unpleasant, is only one factor in learning. Equally if not more important is the logical arrangement or material or facts. When the emotional tone of a lesson is pleasant it is believed to contribute positively in the reception of the lesson, but this does not exclude the fact that some of learning is unpleasant. The primary teacher must teach the child—as pleasantly as possible—that some activities must be undertaken to insure learning even though the tendency of the organism is to resist because they are unpleasant.

Attempting to force fun into everything is nothing more or less than a brainwashing technique. Cultural factors influence the acceptance of what is fun, and if this decade is unconsciously attempting to make fun out of everything there can be little harm in the indiscriminate use of the word. But it can be damaging to misunderstand its meaning and its true use in school learning situations. The real danger of the flagrant overuse of the word *fun* lies in the avoidance of the unpleasant aspects of becoming civilized.

Summary

A child learns many of the fine and gross motor skills by play acts of jumping rope, climbing walls, riding tricycles, roller skating, cutting, and drawing. One of the first contributions the school can make to the child's play experiences is to take care not to repeat activities for motor development which the child has already mastered and to determine carefully whether a given activity really provides practice for the manipulative skill it believes it is establishing.

The success of exploration depends on whether the child has developed an awareness of the things around him and if he desires to use this awareness to increase his stockpile of knowledge.

The need to learn is ingrained in the child's nature, and though it is laborious and often unreliable his exercise of this power in fumbling learning is valuable. Incidental learning results from the many attempts the child makes in fumbling play, and he learns as well to apply many of the insights gained by past generations so that he may eliminate a part of the frustration.

Sensory perceptions received each day by the child stimulates his intellectual and aesthetic capacities to change and mature.

Many primary teachers feel that the major contribution of play lies

in the social adjustment it brings. Social behavior is one of the important accomplishments of play, but we must remember that unacceptable traits can also be played into—as well as out of—the personality. The teacher should therefore be ever watchful for this possibility as she watches for potentialities that rise to the surface as the child feels more certain of his play world.

Play of the young child is one of the oldest known facts concerning his behavior and has caused great speculation among philosophers and educators. Various theories such as surplus energy, life preparation, recapitulation, and self-expression have been advanced.

The experience explanation suggests that play for the child and work for the adult are closely related and differ mainly in the levels of experience manifest in each. Following the definition that play is the child's work, the school must assume the responsibility of utilizing it for the child's greatest benefit.

The educator must accept the fact that the child can experience only restricted play, that unrestricted play exists solely in the realm of theory and outside the bonds of civilized society. Therefore, the degree of restriction placed on play determines its value for the child. Four general types of play may be recognized as basic for a study of this kind: random, imitative, imaginative, and reflective, all of which require a time, a place, persons, and equipment for their pursuit. Society has the duty of providing these necessities in the most meaningful manner possible.

The educator is directly responsible for the quality and quantity of play equipment offered the child. Equipment must be considered from two aspects, that of provision for progressive levels of ability and for relationship to the content of the curriculum.

For ease of discussion, the materials themselves may be divided into intellectual, miniature, therapeutic, sensory, aesthetic, physical, and operating. The wise and balanced use of these divisions of equipment will help greatly in developing the child's manipulative skills, powers of exploration, fumbling learning, sensory perception, social adjustment, and strengthening of latent potentialities.

The school cannot, of course, base the curriculum on the child's random play, but it must recognize the importance that play has in his development. If play is disregarded, it results in real detriment to the school's curriculum; it should be studied carefully and employed skillfully in the school's part in the education of the young.

Part II

Treatment

The Lark and Her Young Ones

A lark who had young ones in a field of grain which was almost ripe was afraid that the reapers would come before her young brood were fledged. So every day when she flew off to look for food, she charged them to take note of what they heard in her absence and to tell her of it when she came home.

One day when she was gone, they heard the owner of the field say to his son that the grain seemed ripe enough to be cut, and tell him to go early the next day and ask their friends and neighbors to come and help reap it.

When the mother lark came home, the little ones quivered and chirped 'round her and told her what had happened, begging her to take them away as fast as she could. The mother bade them be easy, "For," said she, "if he depends on his friends and his neighbors, I am sure the grain will not be reaped tomorrow."

Next day she went out again and left the same orders as before. The owner came, and waited. The sun grew hot, but nothing was done, for not a soul came. "You see," said the owner to his son, "these friends of ours are not to be depended upon; so run off at once to your uncles and cousins, and say I wish them to come early tomorrow morning and help us reap."

This the young ones, in a great fright, also told to their mother. "Do not fear, children," said she. "Kindred and relations are not always very forward in helping one another; but keep your ears open and let me know what you hear tomorrow."

The owner came the next day, and, finding his relations as backward as his neighbors, said to his son, "Now, listen to me. Get two good sickles ready for tomorrow morning, for it seems we must reap the grain by ourselves."

The young ones told this to their mother.

"Then, my dears," said she, "it is time for us to go; for when a man undertakes to do his work himself, it is not so likely that he will be disappointed." She took away her young ones at once, and the grain was reaped the next day by the old man and his son.

Depend upon yourself alone.

This section includes four chapters suggesting types of treatments and reasons for presenting certain content material to the primary-age child.

If the reader depends upon her associates to help her decide what content and treatment handling she should give the curriculum in her class, she may wait for a long time for that help or become involved in discussions that contain contradictory advice or leave no time for instruction. Should the teacher call in relatives, she will find herself in no better position. But if she becomes acquainted herself with the content material and manners of presentation, she will at least have a personal working knowledge. When the primary teacher takes the time to look over all the areas of instruction, then it is unlikely that she will be entirely disappointed with her work.

The following chapters attempt to present the grain that should be sown by the time the child is 8 years old, the grains of ideas, material, tools for thinking, and behavior that will be carried along the road to maturity.

Suggestions and illustrative lessons are given to help the reader understand by self-interpretation the tasks to be accomplished. In addition to these, the reader may refer to the added materials at the close of Chapters 5, 6, and 7. The teacher must depend upon herself alone to be sure that she understands the scope and nature of her tasks, and she must constantly question and seek information on possible solutions to her problems.

The Concept of Treatment

Change is a process normally intended for improvement, but mere change does not insure improved outcomes. Mothers once treated colds with neck scarves of wool soaked in grease, and dressed children in many layers of clothing. Today the changes in treatment of colds give us the impression that improvement has taken place, but we have yet to cure the common cold. Older persons look back and see that the normal course of events is characterized by change or modification, and either silently or vocally suggest with a twinkle that even the improved changes advocated today will go through the process of alteration.

Sensitive school personnel are alert to whatever change they see or feel is needed in the educational program. If one, for instance, could have a panoramic view of primary education from the past to the present, he would follow a series of easily detectable changes in both content and methods of instruction. However, the changes in the content of the primary grades are minor when compared to the changes that have taken place in the technique and methods of instructing the young child.

Primary-grade methods can be characterized by their humanness, and content by its tangibility. These qualities should always be found in our contact with young children, but they are not the only goals that we need to aim at. There may need to be *major* divergencies from past curriculum topics and units. Perhaps methods or techniques should be improved or modified. Whatever is needed, there is no doubt that the process of change is normal, often healthy, and always believed to be for the better.

Stages of Development

Primary education has passed through various stages of development. The first was the "mother's knee" stage at home where the major subjects of reading, writing, and "reckoning" were taught by the enlightened mother or older child. The second stage was characterized by the common school goal of giving each child an equal footing. The third phase was the philosophical and scientific exploration that took place under the direction of Pestalozzi, Froebel, Blow, Hill, Montessori, Hall with O'Shea, Wellman, Updegraph, Horn, Goodenough, and a host of others who have carried on such work recently. The fourth stage was the wedding of the nursery school concepts of social-physical care with educational-mental achievements. It is from this stage that we are now slowly emerging, and primary school leaders are seeking the direction that should be taken.

This next and fifth stage blooms with problems concerning major or minor changes in content and methodology. Authorities, lecturing and writing, differ in their recommendations of where each of these paths should go, but they agree that all primary teachers should be aware that curriculum and technique changes should and will occur and that their role encompasses the recognition, direction, and evaluation of the proposed alterations. If the persons working in the fields are not alerted, the changes cannot take place, and the effort spent on numerous ideas and proposals will be wasted.

Whatever the changes advocated, there is a common theme running through them all emphasizing that this stage of primary education is important: the need to instruct children in the *meaning of learning*. Hammering away at this theme, either consciously or unconsciously, the primary teacher is hoping to encourage each child to ask the *why, how, when, what, and where* questions.

The *meaning of learning* objective is spelled out in the following chapters. Some major or minor changes that may be needed in the content areas are suggested and a list of units believed to be worthwhile is given in Chapter 7, "Skill Treatment," with the hope that the reader will find the new and modified unit topics useful. The titles of the chapters in this section signal the direction the author

believes needs to be taken in primary instruction. The term *treatment* is used in each of these chapter headings, and the particular definitions in each instance are given with the hope that they will awaken teachers to a consideration of the suggested methods of presentation and handling of experiences.

The Components of Treatment

Method is not something that can be divorced from content or the child, but its numerous properties should be distinguished from the whole for reflection and change. The process through which a person obtains thoughts is the force that welds and forms the product. "Sound and vital ideas cannot result from learning through petty teaching devices or methods."¹ The secret of having children recognize the meaning of learning is in the treatment of content. The child will, it is hoped, obtain a meaning of the learning if primary instructors understand, as does the scientist, the treatment that is given to each segment of the curriculum.

Treatment is the term which applies to the process of aggregating all the loose and fluid procedures that have been successful in the field and which have proved vital to learning. Treatment incorporates the methods, techniques, and levels of aspiration that are brought to bear on the content to be learned. Method, often used interchangeably with treatment, refers more often to procedures.

Before deciding what treatment to apply, primary teachers should weigh content experiences and determine the depth to which they expect children to absorb those experiences. Some experiences in the primary grades should be only external while others require a deep, fixed, and overlearned reaction. Treatment to the classroom teacher should mean the emphasis which is given a subject, how long the study should last, and what reactions and behavior it is desirable to have evolve from the study. These three factors, *depth* or *emphasis*, *timing*, and *desired reaction* or *behavior*, constitute the core of any method. When a teacher decides through knowledge of the content, the individual, and the group what is to be taught, and through an appraisal of the material and facilities avail-

¹ Ernest Horn, *Methods of Instruction in the Social Studies*, Scribner, 1937, p. 23.

able for instruction which treatment type is most desirable for a particular learning situation, then that teacher can rest assured that an excellent attempt is being made to make learning meaningful.

Helping young children understand the meaning of learning is not a simple task of merely telling them or showing them what is to be done—it is not verbalization or activated show-and-tell activities. It is a process of causing children to absorb and individualize what goes on in the classroom. When a child becomes enveloped in the material and content under instruction, the teacher becomes enveloped in it as well. The more a teacher knows about the material and the class, the more meaningful will be the learning process. Developing in children the ability to understand the meaning of learning is dependent on each teacher's understanding of terms that are used to direct and guide the curriculum.

Choosing the Proper Treatment

Deciding what type of treatment particular content should have requires the art of balancing three elements. The content itself will help decide which type of treatment (foundational, impressional, or skill) to bring to bear. The children as individuals and the class as a group will also influence the selection of the treatment type. A third related element includes the material and the physical field that is available. These three factors are so important that if one is out of balance the treatment may actually hinder the learning process.

Suppose a third-grade teacher desires to teach a current events unit touching on specific state and national issues. She has outlined the material to be covered and has chosen foundational treatment as the form to be used. This form of treatment requires a vocabulary and verbal knowledge of specific material. However, the decision to give such a unit topic foundational treatment might be unwise because by nature the content is both complex and fluid. The primary child does not have a sufficient background to make a satisfying verbal and formulated concept of the subject, so that he would profit more from an impressional treatment. In this case the nature of the child would also help determine the form of treatment to give the unit.

In other instances such as the teaching of pasting, cutting, and

other operational acts skill treatment is necessary. Here the nature of the child makes it possible for him to obtain the desired skill within a given time span. The material for instruction is readily available and is well within the capacities of all except the handicapped.

If the content for every unit considered for instruction is carefully outlined, it should show the teacher which form of treatment it would be wise to select. The problem that some content presents is that at times portions of it receive varied forms of treatment. Within some learning situations there are specific elements requiring a certain form of treatment while other sections or the major share of the content will receive a different type. For example, a first-grade teacher has selected a unit dealing with numbers. After studying the content and her class she decides to give the material impressional treatment. As the unit unfolds, the number process of counting will come up, and the entire class must be encouraged to overlearn the counting process, which is a skill treatment. Yet the entire unit could not be handled with skill treatment since the content is far beyond the primary child's realm of mastery. However, because a child cannot master something it does not mean that he should not be introduced to it.

This, then, may well be one of the most common difficulties in primary teaching—the confusion in the teacher's mind between the content that constitutes a skill to be accomplished by the primary child and the content that occurs so early that the child should receive only a foundation in it or an awareness of it.

Definition of Terms

This fifth phase in the history of primary school development, which faces us now, should prove as engaging as Beowulf's struggle with Grendel. The task of instructing young children in the meaning of learning is a challenge worth accepting. But we must first pinpoint the meanings for basic terms. Primary teachers who use the terms, readiness, activity, formal and organized work, play, equipment, experience, developmental, correlation, unit organization, and psychological and physiological factors should have a common agreement on their single or multiple definitions. These terms are never fully defined except in field application, but a limited

explanation is essential when discussing content handling. Throughout these pages these terms are used and defined, but some are so basic that they require insured definitions.

Readiness

In the early twentieth century E. L. Thorndike reported three identifiable laws of learning. These laws were readiness, exercise, and effect. According to the law of readiness, when any conduction unit is in a state of being ready, it is satisfying for it to act and annoying not to act. From this description there has evolved a cluster of ideas that blur the operational definition.

Investigators in psychology have found substantial content in this law of readiness. But it is too vague to interpret it as that magical time when a child (conduction unit) will be emotionally, socially, physically, and intellectually ready to study an area or skill.

Defining readiness as sufficient preparation assumes that we accept uncritically the existing ideas on what are the first tasks to accomplish. In reading, the readiness program sometimes is conceived as a no-symbol stage when the child can make only gross discriminations and has no sense of formal organization. In a civilization such as ours, can the young escape exposure to symbols, fine discrimination, and fixed order? Reducing readiness to such a formula belies the fact that the act of getting ready is a preparatory act. We know that by nature the young child will have only an incomplete understanding of what he has experienced, but understanding there will be.

No subject area or skill has been so well dissected as the question of readiness, and much has been written on what the readiness program should contain; yet the proper time to start and end the program is still a matter of guesswork and convenience. Some believe that the young child will show signs that specifically determine his stage of readiness. For instance, in the field of reading he will ask questions about letters, words, and numbers; he shows readiness when he pretends to read from a book, accepts suggestions, asks for help, and spends time with books.

Readiness as defined in an operational sense is composed of varied cyclical acts and intellectual functions that have as a common goal the acquisition of a definite behavior or knowledge. Babbling, for example, is a preparatory act to acquiring language.

Acquiring readiness, like all learning, should be looked upon not as various items, content, or experiences occurring at predetermined times but as a springlike developmental pattern; each preparatory experience should travel toward a goal and should also push back to the first experience that forms the base. Basic elements of any area or content should appear again and again, always in new settings, always with added meanings. Thus, in alphabetical reading, the concept of the alphabet base or in numbers, the counting principle should recur throughout the child's educational life. At first the material is remembered in a vague and imperfect way, but with further experiences the child's perception will gain depth. The question of deciding what will come first and appear most often in this springlike sequence is answered by discovering the significant elements of that which is to be learned. Whenever a concept has a basic, important, and deeply rooted function, it should be selected for consistent and repetitive exposure.

Oral language is basic to reading because reading is a process of deciphering whatever the writing system uses. Therefore, oral language experiences should constitute a major portion of a primary program at all levels. Each area of educational pursuit will contain basic elements or patterns that should be given this "readiness" development. When we realize that primary-grade readiness is not only for the present but also for the ensuing years, we need to determine what both the real and the ideal expectations in the future will be. Education gives each new generation not only what the past has acquired but also the training to create ideas, face problems, and dream dreams yet undreamt by any man.

Activity

In practice this term has grown to mean any occupation with materials. Quite often reference is made to art activities, musical activities, or game activities. Usually such references pertain to the occupations and scheduling of specific tasks, but no attempt is made to ascertain the personal involvement of each child as he follows the given activity. Children can become occupied in the activities the teacher has planned without achieving the assumed or desired results from the experience because neither the teacher nor the child has fully comprehended the meaning of the learning situation. Froebel's method of instruction soon was reduced to the teacher's

giving gifts and the child's occupying himself with the gifts. When any approach, activity, content, or treatment is allowed to occupy the child's time without his understanding, no matter how feebly, then he cannot learn well.

Perhaps the most sterile field application of the term *activity* has been in connection with the hundreds of consuming craft and manipulative projects. These endless tasks of making crepe paper flowers, cereal mosaics, papier-mâché forms, mobiles, egg bouquets, murals, scrapbooks, and take-home articles have reduced some primary teachers to becoming file clerks of meaningless do-it-yourself objects.

There is no part of the school schedule that should escape the scrutiny of the questioning teacher whose "Why is this in the curriculum?" or "Why is this being offered at this particular point?" bring a valuable definiteness to the learning process of education. Children as well as adults demand activity to maintain life, but *meaningful* activity. The problem is not too many projects, activities, tasks, or lessons, but rather what kind and for what purpose, and where they will lead. The child, the teacher, school administrators, and parents should understand the meaning and relationship of what is being done to the content that is being offered.

Experience

This word as defined earlier in this book is important enough to warrant its place here. When a child experiences an activity or situation there is personal involvement. This personal involvement is recognized by the individual who reacts responsively.

Some forms of curriculum organization in the past have used the term *experience* in different ways. For example, the designers of the Experience Curriculum hoped to awaken teachers to the personal involvement necessary in effective learning situations, but because this pattern was compared in a dichotomous situation with subject organization, the power of the pattern waned. The extension of the meaning of the word *experience* to indicate curriculum material resulted in some readers thinking that subject-orientated curriculums failed to develop experiences.

Experiences and activities, or experiencing any activity, for that matter, are not synonymous with planning profitable and meaningful experiences from an activity. A child who in a class of first

graders makes a study of a pet unit complete with a field trip to a pet shop and returns to the classroom to make an "art project" of a paper dog collar is not gaining worthy experience from the study. The activity must be high in value, significant, and selective.

Another word often used with the terms activity and experiences is that of *games*. The definition of the word is slippery and ranges from "a form of amusement" to "an activity according to a set of rules." Most teachers are content to have a cupboard of games that can be used to spruce up a dreary day, expend assumed surplus energy, and give physical movement. Primary teachers have found dodge ball, hot potato, Old MacDonald, and Run, Squirrel, Run perennial stand-bys.

Games that are thought of when people mention the "play in learning" are those loosely organized activities that have elements of competition, individual skill, chance, and drill. The classic example of this type of game is the American Spelling Bee, which was born, extended, modified, and waned in our own common schools. It has been used to stress arithmetic, language, background information, and science facts.

If one is near the primary education field he hears constant discussion concerning the pros and cons of using such games in the classroom. Seldom do the vehement critics of such game occupations consider each of the elements—chance, competition, individual skill, and drill—to be found in these forms. None of the four elements is harmful; in fact, each provides a healthy and realistic approach to learning experiences. The element of chance is the one of the four that is seldom meaningfully explained to the participating pupils.

The successful educational use of games that contain these four characteristics has its place in primary schools, provided one other important aspect is given thought: the material on which it is dependent. Distortion occurs when the material or setting is modified to fit the believed class needs or the teacher's concepts. A simple example of this distortion is found in having children learn through assumed likes and enjoyments. A teacher who decides to drill color identification in her class makes artificial lollipops in the belief that children so love lollipops that they will more quickly learn color! Color is used in some games to supply a clue if the child cannot figure out the procedure—this is sometimes done in training for

sight words or word sounds. However, in spite of the seeming benefit of simplification, such a use of color distorts the material and ultimately retards learning.

The question is not to eliminate these loosely organized reward response situations but to make them fit educational needs and to insure that the children understand why the game is played. If enjoyment accompanies the playing of the games, as it will when their material and purposes are understood, a perfect blend of school needs and human reactions will have occurred.

Unit Organization

Unit organization is the most widely used arrangement of content material, experiences, activities, and games. There are as many sub-forms of units as there are shades of blondes in the universe, but every unit can be patterned around a core, theme, problem, topic, or goal to express the outline of desired learning experiences and information. Regardless of whether a unit is a cultural unit, a resource unit, an experience unit, or a subject-matter unit, it has to be taught to become a force, and therefore the *teaching unit* is the form teachers should consider. A teaching unit is the organization of various experiences that are being taught in sequence to a particular class.

The unit form found in a number of textbooks that offer the outline procedure may be followed within any sensible framework. What is important in unit organization is to envision the three aspects of its form from teacher-school planning through the actual teaching and the children experiencing the work. Unit organization is thoughtful preplanning of time, energy, resources, values, and goals.

The unique properties of a teaching unit are discussed in Chapter 11. Pretests, a sense of involvement on the part of pupils and teacher, and evaluation comprise the three properties which should be investigated by teachers and pupils. Too many units are being given lengthy school time without adequate pretesting to determine whether part or all of the class has already gained sufficient knowledge of the unit under study or has already reached the planned objectives. The teacher who gives pretests designed to sample each of the major aspects of the unit will save effort, direct attention,

and discover some of the many possibilities in the further study of the unit.

When the teacher and pupils both feel their parts in the learning situation, a great part of the problem of motivation will be solved. If the children see sense and order in their lessons and are aware of what is being done, what needs to be accomplished, and what was not accomplished because of uncontrollable reasons, they will be sold on the meaning of learning.

Only in the actual interchange between teacher and pupils can the words and ideas of the unit organization described on paper come alive, but the written framework can contribute heavily to successful field work.

Psychological Factors

Basic psychological learning conditions are ever-present factors in learning situations, and they are just as important as are the properties of unit organization. Laws of use and disuse, forgetting and remembering, the transfer function of the mind—all these have a bearing on unit teaching.

The atmosphere which the teacher creates will have an influence on the classroom tasks. Among the important items to consider are (1) motive-incentive factors, (2) socialized recitation for inter-learning, (3) recognition of the child's nature, (4) latent learning, (5) extensive reading, (6) initial problem set, and (7) purposeful practice. These seven important concepts have a direct relationship to education with meaning.

Time

It is the manner in which children, content, and experiences are treated that in the long run shows how much insight into the learning process a teacher has. Treatment is, then, the term that encompasses the many particulars that must be made to interrelate so children can see the sense in learning. These particulars include content material, methods, devices, activities, experiences, games, psychological factors, and unit organization. One remaining item that binds these many particulars is *time*. How much time, when is the time, and how best to spend the time—these are the important questions. It is a common wish of teachers to move time back in

order to improve what was done. Respecting the time factor is in reality an awareness of a major learning item. Time is on the side of the teacher when she uses it not as a rationale but as a factor that should be guarded and budgeted. It is not necessary to personify time, nor exploit it as did Lewis Carroll's Mad Hatter, but by the same token it is unwise to allow precious school time to filter away. The teacher's task is not to occupy pupil's time, but to provide experiences that make the time fruitfully spent. Master teachers are always desirous of more school time, yet realize that other persons also require their allotments of children's time in order to accomplish their goals.

Summary

In view of the various treatment patterns that may be given, curriculum teachers may relieve themselves of the concern for curriculum overlapping. The nature of content and the nature of children require overlapping as well as sequence. Different treatment patterns should help direct efforts toward making experience in depth the result of this overlapping.

Choosing the proper treatment, whether it be impressional, foundational, or skill, depends on the knowledge of multiple factors. Keeping the content, the child, and the available material in a perfect balance is an educational achievement that comes only with planning. Understanding that terms must not be so general in definition that they lose specific purpose and that teacher, pupils, and parents must have a common knowledge of these terms are the first steps toward effective learning.

Teachers will become as intimate with time as the Mad Hatter but they must not allow it to dominate or deter the patterns of instruction.

At this point in their development, primary schools do not need to defend their place in the educational scheme. However, the time has arrived when children should know what learning is for and why each new generation must learn and continue to learn. The *meaning of learning* should now demand all our professional know-how and efforts. The primary school is the fitting place to begin.

Foundational Treatment

The master share of content material in the primary grades actually receives *foundational treatment*. The nature of the child and the nature of the material demand that we extend the study of this content over a number of school years. The young child should not be expected to become skilled in this material until he has accumulated sufficient experiences and practice in them. What, then, is foundational treatment, and what content should receive foundational treatment?

Foundational treatment of content material denotes those learning experiences that help the child establish mental and verbal recognition of specific content. Such recognition entails understanding of the bases or elements composing the content. Foundational treatment unfolds, extends, and establishes knowledge. It differs from *skill treatment* in that the content treated foundationally as a body is not overlearned or fixed as a permanent habit. Foundational treatment differs from *impressional treatment* in the performance factor: foundational treatment must have verbal expression and must develop the child's ability to express knowledge and problems, neither of which is necessary for building an impression. Impressional treatment develops feeling and awareness; foundational treatment, verbalization and understanding; and skill treatment, fixed or habitual reactions.

The mountainous mass of knowledge that has become part of civilized life makes it imperative for the schools to introduce early in the child's educational life the words, uses, and applications of mental tools and the knowledge they produce. Foundational treat-

ment should be applied to the content areas of language, reading, arithmetic, physical education, and science. Each of these broad fields may be broken into learning units for effective handling. Language instruction and experiences will incorporate oral expression, including gestures and empathy. The written forms of language require handwriting and spelling programs. Reading will entail both the meaning of the reading process and the meaning of the material read. Arithmetic encompasses counting, measurements, predictions, and processes. Physical education foundational treatment will bear heavily on understanding the fitness concept, and the science content will establish the mental processes and tools necessary for approaching problems.

The nature of the material in these fields predisposes it to foundational treatment. Each of these areas contains so much material and demands so many experiences for establishing full understanding that we must be careful not to expect skill accomplishment before the child is fully prepared. Reading, for example, cannot be taught as an overlearned act in the first year or even the first three years of school; to attempt to do so only makes the child perform with half-fixed or little-understood ideas. A good example of treating material with the incorrect form can be seen daily in the area of reading. Many schools, writers, and teachers encourage first-grade pupils to read sight-learned stories silently and with expression, which is on the performance level of the mature reader. Primary students, only recently exposed to this new tool, cannot and should not be expected to handle it with the skill that even many adults have not accomplished as a fixed habit. The nature of the material sets the limits that young children can reach, and the teacher must know content as thoroughly as she does the child's capacities.

The child's nature is the second factor that disposes foundational treatment to those areas mentioned. The child's interests, abilities, and personal needs set in motion the field and limits of his learning. Meanings and understanding are not given to children; society, and the school in particular, only stimulates the child to construct his unique thoughts.

The accuracy of the material that children construct and respond to is dependent on social factors, intelligence, command of language, past experiences, and methods of work. The child will profit by our foundational treatment in the degree to which we call on the

influences of his own experiences on the material covered, sustain his motivation during the study, direct intelligent and significant interests toward the material, and develop his habits of study. If we stress these factors which are inherent in the nature of the child, we lead him to meaningful understanding. It is the aim of foundational treatment to develop not verbalism but rather verbal understanding.

We say that the nature of the material and the nature of the child are important factors in determining the outcome of foundational treatment. Yet there remains a third major factor: the crucial influence of the teacher in the training of the young, which can never be overstated. If the teacher understands the nature of children and the nature of the content, then any form of treatment has a potent beginning. She must understand and apply the psychology of learning, skillfully develop techniques and procedures, keep the subject material alive and direct and organize the uses to which the new knowledge will be turned.

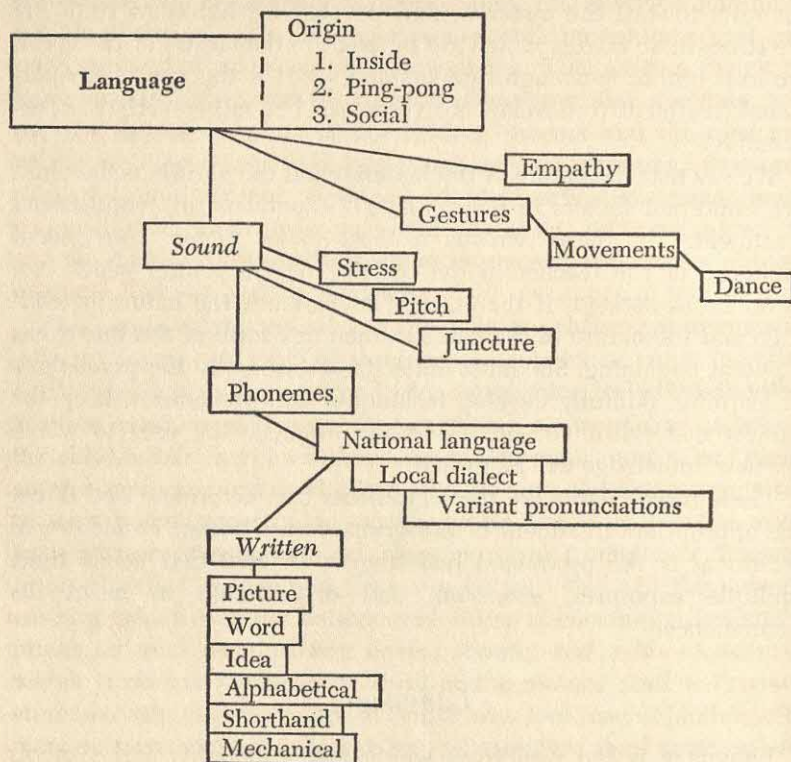
These three factors are the ingredients that determine and direct the appropriate treatment of the primary curriculum. Foundational treatment is the protracted handling of an area that needs time, multiple exposures, extension, and organization to insure its permanence.

Language

Language is the well from which man's thoughts and symbols spring. Without language man would be a mere mammal, but with it he may transcend the Tower of Babel at will. Language and the elements contained within its boundaries need to be given foundational treatment at the primary level. The content must be unfolded and organized so that both the teacher and the learner will see the meaningful relationships that now exist and those derived from the past. Language is so vital to civilization that everything a teacher can learn about it, even if the concepts are somewhat incomplete, will benefit the learning situation.

It is not enough for our primary teachers to know the place language holds in the school curriculum. The teacher must have a meaningful organization of the development of language. The chart below shows in schematic form the properties and substance of the

PROPERTIES AND SUBSTANCE OF LANGUAGE



concept *language*. These divisions are discussed under the heading of oral expression, gestures, empathy, and written language instruction.

Origin of Language

Just as the star-oriented scientists have two conflicting theories of the origin of the universe—steady state and shotgun—so there are three opposing, yet not contradictory, theories of language origin. The *inside theory* states that meanings were connected to bodily sounds. A burp, according to this theory, came to mean satisfaction or stomach upset; a cry, distraction or fear. The *ping-pong theory* gives evidence that words were closely related to the sounds that

were heard; "whisper" implies its own meaning. The *social theory* establishes the need and development of language from the contact man made with others, and goes on to say that language, in turn, made it possible for its users to become civilized. The British philologist Dr. A. S. Diamond believes that man's earliest words were exclamations—*cut, break, kill, hit*—uttered to signify a specific need for help. He points out that these and similar pure verbal roots are preserved almost intact in Bantu and Hebrew, two of the oldest living languages. Whatever the theory or combination of theories of origin one chooses to accept, there is no doubt that language is one mammalian accomplishment that we must direct all new generations in acquiring. By its signs, sounds, and symbols language has made it possible for man to be a distinctive creature.

Oral Expression.

Cries, gestures, and facial and emotional expressions resulting from inside or outside stimulation are believed to mark the beginning of language. These natural acts arising from life situations became conventional, and through the ages people have attached standard meanings to them. Thus, from these acts man moved toward a social language.

Gestures and sounds no doubt coexisted in the first language just as they do today, but the sound element of language now has greater versatility and, therefore, constitutes the more prominent portion. Even though gestures do not have as strong a position in communication as sound—perhaps due to their dependence on the visual aspect for interpretation—we must not underrate them. We have not yet uncovered the place and degree that empathy holds in communication. This part of language must be left for research studies in the future.

The sound element of language has undergone a vast and continuing scientific study. Some basic or general truths have been discovered within the last hundred years that make language instruction more meaningful.

The following terms appear repeatedly in the study of language, and a workable definition of each aids the beginning student.

1. *Phonemes*—the classes of speech sounds that can be recognized and arranged in single basic groups. A phoneme or sound class

is the recurring identifiable sound segment of phenomenal speech. Each language has a limited number of these basic speech signals. English contains approximately 43, classified generally as consonant, vowel, and semivowel phonemes.

2. *Utterance*—a meaningful act of speech. Even speech that has little “meat” may be classified as utterances.
3. *Syllable*—the chief carrier of the breath pulse. A syllable is a unit of pronunciation containing at least one sound, usually a vowel.
4. *Vowel*—a sound signal made by vibrating the air in the open mouth cavity. There are nine vowels and three semivowels in our language.
5. *Consonant*—a less prominent speech and signal sound, made by blocking the air passage and opening it again or by narrowing the passage so air has to work its way through.
6. *Sound*—disturbances, usually of air molecules, that are audible, easily repeated or duplicated.
7. *Accent*—the relative loudness with which an utterance is made. In those utterances containing many phonemes some are stressed more heavily than others. The degree of stress strength is often referred to as *primary* and *secondary* accents.
8. *Noise*—random disturbances of air molecules, difficult to duplicate exactly. Noise is unstable and inharmonic.

Primary teachers need not understand the concept of language to the depth that a phonetician or a linguist does; yet knowledge of the terms used and recognition of the persons who have unlocked unknown elements of language will aid those interested in primary education. And, undeniably, oral language experience must consist of more than time and opportunity for the child to give vent to oral expression. The school, as well as each classroom teacher, must provide the organized experiences for developing insight into oral language.

Past approaches for basing oral language instruction have followed either the *normative* or *utilitarian* avenues. The normative course assumed that there was one accepted form of speech and word pattern usage, and this usage would be demonstrated by the teacher and corrected in the child as he communicated. The utilitarian course respected and accepted the fact that class and individual vari-

ant pronunciation and usage existed and that which was communicated was accepted.

Neither theory can be followed too closely and rigidly in practice. A purely normative approach is unrealistic, and an unmodified utilitarian approach lowers national speech standards. A third frame of reference is needed to give a meaningful foundational treatment for oral language instruction. The answer may lie in a *structural approach*, which makes use of the present knowledge of language bases and the development of speech from infancy.

A foundational program for oral language instruction in the primary grades will include at least these 11 instructional goals.

1. An awareness by both pupil and teacher of noises, sounds, patterns, phonemes, and dialects.
2. The child's right and liberty to express himself—this right must be maintained with spontaneity and dignity.
3. Model imitation opportunities. These opportunities to recognize alternate forms or models will be used to counterattack baby talk, indistinctness, unpleasant tone quality, and incomplete enunciation.
4. Alternate use of *yes* and *no* with variant utterances like *yep, yeah, uh huh* and *naw, uh uh*.
5. Awareness of voice pitch, tone, and volume for different occasions.
6. Establishment of polite forms of social discourse—*thank you, you're welcome, please, and excuse me*.
7. Recognition and functional knowledge of special oral language situations—telephoning, storytelling, giving directions, singing, and choral speech.
8. Organization of thoughts and ideas into sequences and meaningful units.
9. Agility and facility in the use of native speech patterns.
10. Auditory discrimination.
11. The value and need of standard gestures in combination with oral speech.

These 11 instructional jobs within the oral language division may develop from planned activities and hence become personal experiences. The success of the program depends on the provision of

extensive treatment and *sequential* instruction at each age or grade level for the years 4 through 9.

STRUCTURE OF LANGUAGE

The language instruction program is so comprehensive that primary teachers will need to turn to reference books in order to gain foundational knowledge for their planning. Works such as Leonard Bloomfield's *Language* and *Let's Read*, Robert Hall's *Leave Your Language Alone*, Donald Lloyd and Harry Warfel's *American English in its Cultural Setting*, Zellig S. Harris's *Methods of Structural Linguistics* will provide valuable information and explanations.

If the structural frame of reference is to be part of the oral language program, teachers will make use of the knowledge that linguists have established concerning oral expression. These ideas are:

1. Oral language is the base of written and recorded language.
2. Spoken language is the language.
3. Language changes continually but slowly.
4. Usage is relative and correctness rests upon current usage.
5. Social setting determines usage.

Making use of these findings will help teachers discover children's individual differences in sound patterns, word patterns, and word orders. If we can shift some of the present emphasis on associations by word meaning to associations by sound-pattern meaning, we will be providing children with direct experiences in oral language as a subject and not as a tool. Language is often taught only as a tool subject with little consideration of its content factors. But language contains content with history, social aspects, patterns, and structure. Assuming that language is only a tool and contains no meaningful or explanatory content in its own right is to admit defeat before trial.

The listening program that should receive skill treatment gives some insight into the differences between noise and sounds. Teachers and pupils alike must approach oral language from a subjective approach or they will be waylaid in sidetracks like "rules for listening."

Oral language is basic to other forms of communication just as

counting is basic to arithmetic. The teacher should show the pupils that the cry of a baby is not a chance or meaningless activity, but is both an inside reactor and a practice song for establishing the phonemes for speech. A simple explanation of this may be read in Munro Leaf's *Reading Can Be Fun*. Despite its candy-coated title, the book's contents will help give foundational treatment to oral expression. Rudyard Kipling's delightful story "How the Alphabet Was Made" in the *Just So Stories* gives second and third graders a beautiful and humorous explanation of written language: "... because it was a nasty, nosy, noise, they just drew noses for the N-sound."

All primary teachers must become sensitized to sound patterns, unique dialects, and social-class language norms in oral speech and words. Many teachers will find it challenging to make themselves and their young pupils aware of the structure of language, the meanings of sound, and noise. They will construct stories to read to children that will start reflective play with oral language content.

Without some knowledge of the structure of language the primary teacher will find herself drifting from pillar to post in an attempt to evaluate and improve the daily instruction in her classroom. In passing on to her pupils an explanation for the beginning of language, she is giving herself a firm stand from which to pivot in the choice and use of language experiences for the children.

LIBERTY SPEECH

The second instructional task given in the list of 11 is very fundamental. It seems strange to stress this point in the twentieth century and in the country that is the cradle of democracy, and yet persistent reiteration is needed to insure children's right to express themselves, not without supervision but with spontaneity and dignity. Oral language, as we discovered in discussing the previous point, is determined by social-class usage, and this part of the environment conditions teachers as well as pupils. The teacher cannot impose her social-class language standards on the child of 4 to 9 without recognizing that from his early years on the child is continually modeling his oral patterns after his primary social group. Allowing children to use the expressions of their primary group while furnishing them with a different model and insight into enlarged

language usage will give more promise for lasting foundations from oral instruction.

The child's liberty in spontaneous and individual expression is slightly different from complete oral freedom. Many children have had enough permissive expression; they need to stop and listen to others while they earn and learn the right to speak. Liberty speech is reflective speech in which the values placed on utterances are relative. All words may not be given equal value; liberty speech is based on weighing spoken ideas.

Providing the environment conducive to oral expression means the expansion of play equipment. Children in the primary grades will express themselves more freely and extend their vocabularies more readily if, for instance, the house corner can become a shoe store, flower shop, beauty salon, missile base, or airport. Monthly changes in the classroom play corner will pay off in oral expression.

"Show-and-tell" practice may need to come under analysis if liberty speech is to be developed. Children may report on problems that occurred the day before, or instead teacher and pupils may look for material outside the classroom which will be used to answer questions or solve problems. Liberty speech requires a higher standard for the discussion period—a standard that is well worth attaining. For instance, the children may have oral newspapers through which they report their views to other classes daily or weekly. Such oral activities will require thought and planning, and children should benefit from this form of oral expression which directs them to take liberty speech seriously.

Liberty speech is built upon a base of conversation. The primary teacher may find it advisable to consider oral expression in three forms: conversation, discussion, and reporting. The school schedule may be arranged so that each of these three forms will be developed. Each child should, primarily, have the feeling that his teacher and schoolmates are receptive conversationalists. Discussion, then, is less spontaneous than conversation and consists of oral expression by the group concerning a given topic or interest. Reporting is reflective speech since the person using it has had to organize the thoughts to be presented. Effective reporting springs from a base of personal experience, and is presented with judgments and values. Understanding these three forms of oral speech aids the teacher in giving decisiveness to liberty speech.

MODELS AND IMITATION

The young child is limited by time and opportunity in the number of experiences he can call on as a basis for making judgments and decisions. Because of this many of us assume that to lessen confusion only one model or form should be given to the young in early education, but the opposite is probably better for intellectual development. Children who are given multiple models and imitative sources will develop more colorful language.

Primary teachers should be able to imitate dialect well, read stories in different speech variants, and identify unique speech patterns. Developing this variable functional base, the teacher will become a versatile speaker and, therefore greatly enlarge the children's foundations. The young do not need, nor should they have, a "Mary-one-note" teacher. Unpleasant tone qualities in a child can be helped by providing a range of tones he may imitate. Incomplete and indistinct pronunciation can be aided by a teacher who can change stresses and pitches in her own voice. The confusion and frustration that might result because of the richer model provided will not warp the children unless the teacher exerts negative pressures and gives wrong emphasis to speech; frustration and confusion are the base of problems, and problem solving is the chief occupation of man. Our task lies in training children to recognize the problems and providing models for them to follow.

"YES" AND "YEP"

Primary teachers seem to be fighting a losing battle when, in keeping with their own normative training in oral expression, they attempt to train the young always to use the terms *yes*, *no*, *all right*, *what* and the like. Young children should be given alternate forms for *yep*, *uh huh*, *OK*, and *yeah*, *uh uh*, and *huh?*, but to expect them to use these forms at all times is another thing. The crux of the training is that all of these various forms are communicating ideas. There is nothing functionally wrong with *yeah* or *yep*—they are correct in many social discourses—but the child should be given duplicate and alternate forms. Even 4- and 5-year-olds realize the differences in social situations, and they can see the humor that lies in applying casual, informal language to formal occasions.

Children should be given problem situations in which they can identify the appropriate speech form for acceptable usage. Having

pupils watch television programs which feature interviews with younger children will help them see the reason for developing alternate forms of speech. Children are quite capable of learning early that they are judged by not only what they do but by what they say and how they say it.

VOICE CONTROL

American women in general and primary teachers with them have been criticized for their harsh, high-pitched voices. As a result, children are constantly being bombarded with instructions to develop a quiet, well-modulated voice. Why this cult of tone development? Should we not use different pitches, stresses, volumes, and timbres to distinguish between people, situations, and the severity of experiences? Many young children speak in either a low or high register which, if identified, can be encouraged in order to make the child aware of his own uniqueness. Early training should be more toward individualizing, not standardizing, the voice.

The field situation should establish the accepted limitations in volume, pitch, and timbre, but all attempts to overgeneralize and make the human voice a colorless standard tool should be exposed as artificial and unnatural.

THANK YOU

Early establishment of the long-used polite forms of social intercourse are valuable. Such expressions as *thank you*, *you're welcome*, *excuse me*, *please*, and *I'm sorry* may be taught from the understanding level rather than merely by rote. Several trade books are available that will make the teaching of these words an interesting as well as a humorous experience. *What Do You Say, Dear?* by Sesyle Joslin and *What If Everybody Did?* by Jo Ann Stover have the tongue-in-cheek approach while Munro Leaf's *Manners Can Be Fun* presents its message in cartoon form.

Children will respond to learning these expressions if they are practiced by the adults who surround them. These polite forms are not passing fancies but common-sense behavior patterns that have become standard expressions of the social practice of having consideration for others.

SPECIAL ORAL SITUATIONS

In every culture there are special oral situations that demand extra

training with foundational treatment. Today, for example, the telephone has become a common article in homes and public buildings. Children as well as some adults need systematic instruction in the courteous and efficient procedures of answering the telephone and carrying on a conversation. Too often a caller is not told who is answering his call or given any clear replies to his requests. As fascinating as a telephone is to the young, it is not a toy to be used for foolish pleasure. Simple dramatic play with a model or short-time hook-ups in the classroom should establish training in the following rules of procedure.

1. Accurate memorization of the child's home telephone number.
2. Accurate memorization of parent's business telephone number.
3. Accurate memorization of the number of the information operator.
4. Accurate memorization of fire and police telephone numbers.
5. Acceptable ways of answering a telephone.
6. Acceptable forms of initially addressing a person who answers a call.
7. Thoughtful telephone habits relative to party lines, busy signals, and wrong numbers.
8. Various means of meeting such circumstances as long-distance calls, emergency calls, or the recording of information.

American telephone companies have sold the public on the merits of one or more telephones in the home and school, and the school has the task of helping form foundational reactions to this article of civilization. Perhaps more telephone companies can be persuaded to place telephone jacks in primary classrooms so that for two or three weeks out of each year actual experience can be given to children by allowing them to call their homes and friends. Important oral behavior related to telephone conditions may be accomplished in this way. Model telephones are very realistic, but they lack the actual participation that connects systematic learning situations with the out-of-school world.

Other special oral situations need specific attention at this age level if the child is to develop verbal recognition. Giving proper directions, storytelling to young brothers and sisters, and reporting special events should be demonstrated and practiced for several years in order to give the child the background for pleasant living.

Children can and will give sensible directions if awakened to the need. All young children should be encouraged to retell stories to a younger audience, and a short entertaining period of this type is not beyond the ability of the primary child.

ORGANIZATION OF ORAL THOUGHTS

Once the human has acquired the ability of oral expression in his native tongue, he seems to produce a constant flow of words and sentences without a great deal of forethought. In the middle years of school, children will be given instruction on the need and value of outlining. Oral outlining is a prior experience and helps children establish patterns of oral organization and sequence of expression, both of which are valuable in transmitting thoughts. Encouraging children to recall events with the purpose of placing ordinal values on episodes is a part of this special instructional task. In the beginning stages, encouraging children to finish a partly-told story will aid in this process. Problem-solving stories and opportunities for inventing original stories should help develop oral organizational skills.

NATIVE SPEECH PATTERNS

There is no language academy in America; no one body of persons can say that a certain pronunciation or sentence structure is permanent and best. The only actual criterion we have for speech patterns is usage, which, to be reliable, must be based on more than one or two persons or a small community; usage must be overwhelming in its balance. Defining usage as "a statistical favor in the direction of the most" allows us to develop a case for speech patterns that can be called continuous. Defining usage as "a changing action as well as a stabilizing force" makes it possible to help children overlearn speech patterns. Dictionaries are at present attempting to establish directions for preferred usage, but the young child does not have the background necessary to interpret them.

It was hoped that radio and television would aid schools in establishing a specific usage pattern, but with the emphasis on realism these media have instead brought to the individual all the various speech patterns of the nation. *Git* and *jes'* are heard on the air almost as often as *get* and *just*, with the result that the public has, if anything, been exposed to more speech variations than they would otherwise know to exist.

The nation as a whole defies any attempt to standardize its lan-

guage. This makes for a colorful language, without doubt. Only when geographical dialects become too severe for successful communication of ideas is there danger in local speech patterns. A compromise seems to have been reached in man's development of the so-called pidgin languages. Businessmen throughout the world, because of the necessity of dealing with other languages, have been responsible for these combinations of the native tongue and sentence structuring from another language. Americans, of course, are familiar with such expressions as "Heap big Injun go warpath."

Children of the preschool age sometimes develop their own inter-circle pidgin language, and often adults never break the barrier. Handicapped children may do this with brothers and sisters or others within their primary social groups with the result that enlarged communication is impossible.

Only by becoming aware of the structure of language and the laws that seem to govern it is it possible for teachers to train the young effectively in native speech patterns. The school's task is not to destroy colorful local speech forms but to make children aware of the many forms in use and the necessity of being able to communicate successfully with those in another locale. By helping pupils through foundational work in language and usage to recognize their native inheritance, teachers are contributing to the realization of an international language among future generations.

The one stable element in oral language which teachers can help establish in children's speech are the sounds necessary for speaking English. The sounds of the American language include 12 or 13 vowels, 9 or 10 vowel combinations, and about 30 consonants or consonant combinations. These fairly fixed American sounds are in the child's oral vocabulary and it is the task of the school to establish the child's agility with the phonemes of his native tongue. In this process the teacher will rely heavily on the old custom of "Roman gags" such as reading and rereading *Peter Piper's Alphabet* and similar selections. A few are given below so that you may test your own phonemic agility as you read.

I would, if I could;
 If I couldn't, how could I?
 I couldn't, without I could, could I?
 Could you, without you could, could ye?
 Could ye? Could?
 Could you, without you could, could ye?

My dame hath a lame tame crane,
 My dame hath a crane that is lame.
 Pray, gentle Jane, let my dame's tame crane
 Feed and come home again.

'Round and 'round the rugged rock
 The ragged rascal ran.
 How many R's are there in that?
 Now tell me if you can.

Timothy Titus took two ties
 To tie two taps to two tall trees
 To terrify the terrible Thomas à Tullness.
 How many T's in that?

AUDITORY DISCRIMINATION

Defective auditory discrimination is the one difficulty that carries over into reading and understanding the meaning of words. Early in the child's education accurate measurements should be made of his unique auditory perception. This should not be done only once but should be repeated yearly during the primary grades in order to obtain a more reliable picture of the child's perception.

Some children have seasonal deafness or temporary monohearing. It is essential to discover these individual characteristics, and every teacher should encourage both school and home to assume the initiative in detecting hearing impairments. Observation and informal tests, of course, must be verified by audiometer tests and audiogram readings.

There are a number of questions that a teacher should ask and be certain that each child can answer concerning auditory discrimination. A minimum list follows:

1. Is each child able to distinguish between sounds of words (such as *witch-which*)?
2. Can each child match sound patterns (such as *hat* with *cat* or *matter* with *platter*)?
3. Can each child identify word units (such as *something-some* and *thing*)?
4. Can the child repeat a series of sounds accurately (such as *ball-pot-snap-cot-king*)?
5. Does the child stress the wrong syllable in common words (such as *delaying*)?

Giving auditory discrimination instruction is essential for oral expression, and reading will not proceed with the success it should if children are not made aware through foundational treatment of the elements of discrimination. Matching sounds, distinguishing differences, and locating word sound forms need continuous coverage through the primary years.

Gestures

The big step in the evolution of meaningful language was marked by man's recognition that a response could be made for an idea or thought. This juxtaposition of ideas and standard acts started man on the royal road to symbolic analysis. Past and present instruction in the primary grades assumes that oral language has replaced gestural language, but the two forms still coexist as they did in the primitive stages. Yet, even if we can accept this statement, it seems we cannot bring ourselves to endorse a systematic instruction of gestural language—which may be one of our biggest oversights in effective language teaching.

A great amount of incidental teaching of gestures is experienced by young children as can be verified by hand wavings, quieting signs, and shaking of heads. It is believed, however, that more systematic foundational treatment of gestures should be given to young children early in their educational lives. This treatment would have the objective of training the child in (1) awareness and recognition of basic gestures, (2) the value and use of gestures, and (3) inaccuracies and misinterpretations of gestures.

The list of standard gestures below should make one aware of the great number of meaningful movements that are everyday communicative acts. Children should receive some instruction in them so that they will attach a standard meaning to each, thereby avoiding half-formed movements that cause misinterpretation.

GESTURE	MEANING
Wave hand	Hello or good-bye
Nod head	Yes
Shake head	No
Raise eyebrows	Surprise or doubt
Hunch shoulders	Do not know
Thrust hand away from body	Go away
Bring projecting hand or finger toward body	Come

GESTURE	MEANING
Shake index finger	Warning
Hands on hips	Disgust
Projected lower lip	Disappointment, pouting
Lowering of head	Sadness or disappointment
Gritting of teeth	Almost uncontrollable anger
Crossed fingers	Hope, wishful thinking
Wiping forehead	Puzzlement, disagreement, dissatisfaction
Opening mouth wide	Surprise, disbelief
Smiling	Pleasure
Shaking hands	Greeting
Pointing index finger	Accusation
Winking	Intimacy or inclusion into a secret plot
Stamping feet	Attention-getting device, temper
Hand on head	Thinking
Hand over cheek	Amazement
Protruding tongue	Dislike, teasing
Tapping foot	Impatience
Nose in air	Snobbishness
Clapping hands	Pleasure, appreciation
Shivering	Cold
Clenching fists	Anger, belligerence
Twiddling thumbs	Boredom or impatience
Wringing hands	Worry
Jumping up and down	Excitement
Scratching head	Confusion
Folding hands	Attention
Touching palms	Prayer
Extending palms, fingers up	Stop
Circle made by thumb and index finger	All right
Rigid hand to forehead	Salute
V made of fingers	Victory
Clasping hands over the head	Greeting, victory, appreciation

This brief list in no way exhausts the great number of body movements which have come to be standard symbol bearers in our present civilization. To give foundational instruction on gestures at the primary level, teachers should make themselves aware of the numerous colorful motions in everyday use. Care should be taken in school situations to prevent the mention or use of vulgar gestures which children encounter and pick up with confused thoughts. Perhaps it is best to leave such vulgarities to the hazy meaning substandard

level. The primary level is not the proper time to direct attention to vulgar gestures. These children pick up outside the school's controlled contacts and the best group method of handling them lies in ignoring them. The three objectives in gestural instruction will provide meaningful lessons for each new generation.

Empathy

Many teachers react to children and communicative behavior situations with *sympathetic* responses but fail to react to all with *empathic* responses. Empathy and sympathy responses are confused by many. A successful learning situation should have the *empathic* element. What is this dimension and how can it be identified?

Empathy is the inward feeling that an individual registers in each social encounter through his ability to copy the other person's feelings or to respond mentally to a situation as the other person does. In the process of identifying the other person's emotion and feelings one does not have to accept or reject the feelings. Rather, just the opposite tends to be true; a truly empathic person is one who makes no judgment on the identified mutual emotion or feeling, but only recognizes it.

A primary teacher needs to develop empathy and communicate it to others. Teaching the young is not solely instilling knowledge, facts, and behavior that will help children along the road to civilization. It has, in addition to these worthy aims, dimensions that are difficult to identify. Until a better term is found, the word *empathy* may be used to designate the extra dimension that rounds out the communicative element found in society. The other elements—gestures, oral language, and written expression—comprise the intellectual dimension, but it is empathy that lends the emotional tone and interpretation to communication.

Empathy differs from what most people practice when they react sympathetically to others. Sympathetic reactions may be empathic, but not necessarily. Empathy is an "infeeling" for others, and sympathy is an agreement with others. This, in practice, is what we feel we are doing when, for instance, we sit on the floor with children during certain activities. Empathic behavior consists of (1) conventional emotional responses to those situations that have been standardized, (2) affirmation that the past is past and cannot be changed or criticized on a personal level, (3) identification of possible past

experiences that produce present behavior, (4) a sense of humor and seriousness, and (5) a belief that each child can learn or unlearn a behavior—a belief that the child has the capacity to learn, not just to grow.

To teach these empathic characteristics may seem to be a laborious task at present. Without a doubt, however, if we could develop empathic reactions into a symbolic level of communication by identifying certain emotional-mental reactions and teaching them as foundational experiences, we might soon develop a common repertory of human culture.

Empathic behavior is more than a theory or hypothesis. Thanks to Freud, Dollard, Rogers, and Miller we can identify many repeatable facets of empathic behavior, and can give them foundational treatment early in primary education. Such instructional tasks could well include the following:

1. Identification of and respect for the fact that everyone has emotions. These emotions (anger, fear, love, pity, general anxiety) need to be recognized and labeled by the child.
2. The effect these labeled emotions will have on the words of the speaker and on the listener.
3. The normal suppression of temporary emotional reactions some social situations demand.
4. The situations where an individual and a group need to hide an emotional reaction.

Empathic behavior is, in its true sense, intellectual control and understanding of emotional behavior, and each teacher can help students solve special communicative problems if first she stops and thinks of the feelings involved both in herself and in the pupil.

The Written Forms

A large number of children in the world's population receive only slight instruction in the elements of communication—oral expression, gestural acts, and empathic overtones—and never acquire an ability to communicate in the tools of writing, reading, and spelling; these elements are symbols of a high degree of civilization. Each generation must acquire meaningful use of all six of these tools to live efficiently. The first three are fundamental to the last three, but in our culture all six must be learned passably well.

Instruction in writing, reading, and spelling is more complicated than its appearance suggests and these three language elements cannot be skillfully acquired by the young in the short four years of primary education. The nature of the content of these areas calls for foundational treatment.

Two aspects of these elements will govern the foundational treatment: the development of the subject and the individual's progress. A third factor, the meaning of the material read, written, and spelled, is generally believed to be more important than these two, but in reality it counteracts them. Too often we put this end product first and never give systematic instruction in the meaning of the writing system, the reading process, and the structural spelling forms.

As we consider the material in each of these three areas, let us keep in mind that the pupil needs to understand the evolution of the tool as well as the meaning of what is written or spelled.

Handwriting

Anthropologists have demonstrated with ample evidence that all cultures in existence have developed a complicated oral language structure. It has only been within the last two centuries that a majority of the existing cultures have practiced an alphabetical form of writing.

Writing is a permanent visual or sound record of utterances. The present forms of recording—handwriting, films, phonograph records, and tapes—have undergone changes and will undergo more as long as cultures exist.

Handwriting in the alphabetical form seems to have grown out of *picturing* or *drawing*, the first level of writing, which became stylized and conventionalized and is still in use today. There are remnants of each evolutionary stage in present writing forms. After picture writing came *word writing*, *sound writing*, *alphabetical writing*, *word-sound writing* (shorthand), and finally, *mechanical writing*.

Picture writing is not based on a universal sound language but only on a visual understanding of what is seen and drawn. If a person sees a picture of a cat and knows from experience what a cat is, he can read the picture of cat. The reader may not have the same sound word for the picture, but nevertheless he can grasp the idea from the drawing. Picture writing is found in our present culture in trademarks, advertising signs, and directional drawings.

A second main type of writing that has developed is *word writing*, of which old Chinese writing is the most perfect example. Complete systems of word communication exist in our culture when we consider the terms that come to mind on reading such symbols as +, -, ×, (), :, 1, 2, 3-10, “”, !, and ?. Word writing brings to mind the whole word as does a picture but it is an abstraction or symbol for the word.

Idea writing is a fusion of word and picture writing and consists of those marks that cause us to think of synonyms such as *good*, *like*, *dark* and *right*. Weather symbols transmit ideas to the reader by conventionalizing specific ideas. A colored circle can easily be interpreted as cloudy, a half-colored circle as partly cloudy, and an uncolored circle as bright and sunny.

Word and idea writing have one distinguishing feature which does not appear in other forms of writing: they indicate nothing of the order or sound of the word, and therefore can be used in various languages. International road signs as advocated by the United Nations are examples of cross-culture writing.

The dominant form of writing for our purposes is, of course, *alphabetical writing*. Alphabetic writing is a symbolic representation of unit speech sounds. Twenty-six or so characters represent producible speech unit sounds. Because the speech units grew from the base of picture-word-idea writing, remnants of these other forms are discernible in alphabetical writing. Some present-day languages have regular or almost regular alphabetical sound relationships, but English has a colorful blend of all forms of writing systems. Proof that alphabetical writing is an improvement over picture or idea writing lies in the fact that we can write any idea or name for a picture or a description using only 26 characters. In fact, with alphabetic writing, we can create sound patterns that have no present meaning and establish new words if we desire.

Though alphabetical writing is here to stay, even its adaptability and economy have not prevented human ingenuity from improving on it. A fourth form of writing is *shorthand*, which is practiced by a small segment of society.

If man had not followed his desire to improve his methods of recording language, shorthand might have been the stopping point in language transmission. We have developed mechanical means for exact preservation and broadcasting of language as it is uttered.

The radio, tape, and phonograph record can transmit the sound and emotions of speech. The movie strip and television tape are capable of recording and transmitting all three basic elements of language. By these means sound, gestural, and emotional aspects of language may be captured for mass distribution now as well as for transmission to posterity.

"What next?" is the question many of us pose when we consider language in this century. If current research is fruitful, some day we may have communication machines that will translate any sound language into any other language, and then we will have a mechanical tool capable of ascending the mountain of Babel. The evolution of language has not stopped, and greater heights will be reached if we instruct the young in what we have at this point.

Recognizing the existence of these various forms of writing gives rise to two of our instructional tasks. If we can train children to discern the differences between alphabetical writing and picture writing, we will be teaching the evolutionary characteristics of language and the various existing writing systems. Each of these writing systems require different skills in order to decipher them. The problems involved in reading writing will be discussed in the section on reading.

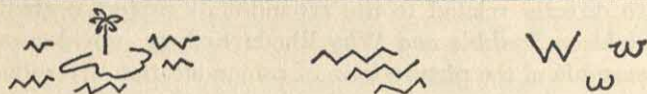
Writing systems may have grown from man's motor activity and, if so, are directly related to the art-and-craft subject content. In *What Children Scribble and Why* Rhoda Kellogg provides an excellent example of the picture form of communication.¹ Her illustration shows the development from the recognizable scribble marks of young children through the various forms until abstract writing is reached. These stages—scribble, diagrams, combines, aggregates, pictures, and abstractions—are identifiable. Research needs to be done to pinpoint their appearance in individuals and groups of children, and the structures of drawings need to be tested statistically in relation to a biological or psychological origin. Until more research is done we can only follow with anticipation the work that Rhoda Kellogg has pioneered. Subjective interpretation may now be made from what she reports, but subjective statements may not prove valid. Children should be allowed to draw freely as they acquire the knowledge of written forms of language. Drawing for art's sake may not be far removed from the process of writing for idea's sake.

¹ Rhoda Kellogg, *What Children Scribble and Why*, Author's Edition, 1955.

The acquisition of handwriting is not a mechanical skill that can be given to a child overnight or in a few well-constructed lessons. A number of foundational experiences over the primary-grade years are necessary for a child to acquire any facility in this tool. Listening, an obvious instructional task involved in the handwriting area, directs the primary teacher to understand the structure of language in order to make her handwriting treatment meaningful.

THE INSTRUCTIONAL TASKS OF HANDWRITING

Task 1. Understanding the evolution of written language. Each primary teacher will find ample opportunity to put to use the knowledge she gains from her study of the history of language. Learning the stages through which a word has gone contributes much to an understanding of the process as a whole. For example, a picture of an eagle was drawn once perhaps as a truly representative form. This pictorial first stage illustrates drawing for *thing-picture's* sake. The eagle picture was intended to bring to mind *eagle*. The second stage may be classified as *word writing*. The picture was drawn to suggest *a soul like an eagle*. Finally, the picture form took letter shape and the letter shape evolved to represent a sound rather than an object or word.



Five distinct forms of writing, evolved through its history, exist today: (1) object-pictures, (2) word-idea pictures, (3) idea-sound pictures, (4) letter-sound pictures, and (5) syllable-sound pictures.

Task 2. The nature of the individual motor acts involved in writing. The work of Rhoda Kellogg may aid the teacher in determining the developmental level of each child. The handwriting pretests devised by Luella Cole can be used to determine the nature of the individual child's ability.² Along with giving developmental and writing readiness tests, the teacher should put quality handwriting scales on exhibit and refer to them frequently in training the children in

² Luella Cole, *The Elementary School Subjects*, Rinehart, 1953.

legibility. Such quality handwriting scales may be made commercially, by the school, or by a particular class.

The Handwriting Committee of the University of Wisconsin has furthered the work of E. L. Thorndike, L. P. Ayres, Frank Freeman, and P. V. West by adjusting and focusing an ordinal handwriting scale of legibility. The research reports of Virgil Herrick, G. Laurence Rarick, and T. L. Harris suggest that we have not yet unlocked all of the mysteries of the individual's reaction in handwriting, individual perception of handwriting levels, and judgmental procedure for determining a normative scale tool. A study of handwriting published by the University's School of Education in 1960 compares the practices and systems advocated by 19 commercial handwriting programs and brings important information to light. The individual approach to teaching handwriting seems to be the order of the day for primary teachers, according to this committee's reports of research in the basic skills. Analysis of the letter and numeral forms in commercial systems shows far more disagreement than agreement. Readiness training in handwriting is given lip service but little defined direction by commercial programs. These and many other aspects of handwriting programs are brought to light in this recent publication.³

Task 3. Recognition and reproduction of the extant forms of writing. These forms may be recognized in the picture writing found in trademarks, the word writing found in street signs, the idea and sound forms found in rebus writing, and, of course, alphabetical writing.

Task 4. Recognition and reproduction of the prevalent forms of alphabetical writing. Capital-letter, small-letter, manuscript, and cursive forms are the four major types in practice. An authoritative discussion of the controversy over when and how to teach handwriting is found in Greene's and Petty's recent book.⁴

Task 5. The use of handwriting as a means of expression and thought. The learning experiences necessary to make children aware

³ Virgil E. Herrick and Carolyn A. Reuther, *Comparison of Practices in Handwriting Advocated by Nineteen Commercial Systems of Handwriting Instruction*, University of Wisconsin, Committee on Research on Basic Skills, July, 1960.

⁴ Harry A. Greene and Walter T. Petty, *Developing Language Skills in the Elementary School*, Allyn and Bacon, 1959.

of writing and desirous of expressing their ideas through the various forms of writing must necessarily place emphasis on the alphabetical form.

Task 6. Establishment of adequate practice periods for training in handwriting at all primary grade levels. This is a self-explanatory task but one which cannot be overlooked if successful learning is to be achieved.

The disagreements on the question of teaching the manuscript or cursive writing form have diminished in the last quarter-century, and each school system has established a more or less specific training program. Along with the passing of the school bell and double desk has gone the specific handwriting supervisor who breezed into the elementary grades and imposed a system of handwriting that often involved making page after page of concentric circles that could be seen through about as easily as a railroad tunnel.

Conditions in American schools surrounding the organization of instruction are not yet stable. Handwriting instruction is given by the classroom teacher, but teachers do not commonly agree on the form of manuscript or cursive writing that is to be demonstrated for the children's imitation. Although most teachers use a commercial system as a base for projecting letter formation rather than attempting to develop a pattern or quality scale of their own, there is no general agreement between schools or within schools concerning the commercial system for use as a pattern. In addition, two or more commercial systems or patterns are used for evaluating children's writing rather than a single form.

American schools show a great variability of practice in teaching handwriting. For example, the time for changing to cursive writing from manuscript—which is widely favored in the primary grades—varies greatly from school to school. Handwriting instruction begins at the 6-year-old level or first grade and is generally given in short daily periods of 15 to 20 minutes. Most teachers believe handwriting to be best taught in connection with letter writing, chart recording, and other integrated activities. Content for practice in handwriting is drawn from other subject areas, such as reading, language, science, and social studies. Very little attempt is made to expose young children to the content material of writing per se.

The implications of the tasks suggested above and existing prac-

tices and patterns confront the primary teacher with a lively area for foundational treatment. Handwriting is not a dead subject; it is in great need of further research and imaginative teaching that will bring structure, standards, norms, and practices together.

Spelling

The writing of regular alphabetical languages such as Spanish, Bohemian, and Finnish is not burdened with the spelling problems that other languages with more variant bases have. Like any other written tongue, English did not develop in a single stroke as a finished, consistent, and polished system. Nor do the people using English today desire wholeheartedly to modify the writing system to accord with current knowledge of phonemes and language symbols. Written English is mainly alphabetical, and all its words are spelled with 26 characters. Some English spelling veers in the direction of word writing, however; for instance, the word *knight* carries a *k* to distinguish it from the written form *night*. This intermixture of word writing and alphabetical writing has given rise to a great number of misconceptions about the English language and its spelling practices. These misconceptions, along with a shortage of fresh approaches, have created the belief that spelling should be taught incidentally rather than systematically. In reality, the opposite is true, as it is in any subject which has undergone years of development. An often-made statement is that the spelling of the language varies greatly, but in reality it is far more consistent in its structure than is generally recognized. We only remember the complex irregularities that create spelling problems and fail to realize that thousands of words follow regular phoneme patterns; the majority can be spelled in only one way, a symbol for each sound, and so do not need to be drilled or overstudied by those who can hear and reproduce the sounds of the language and relate them to their symbols.

Some of the terms and methods of linguists will help explain the phonogramic generalizations of our language. The use of *minimal pairs* will prove a great benefit to all beginning spellers. Minimal pairs are sets of words such as *soon* and *moon* or *had* and *bad*, which differ in the smallest audible unit, the phoneme. Phonemes can be organized for systematic study into phonogramic families. Sometimes an emphasis helps the child make a distinction, as between *gas*

houselight and *gashouse light*. Training children to listen to sounds and to think what minimal pair might have been said will make them conscious of these language features. Auditory discrimination lessons are primarily designed to do this, but often stress rhymes and likeness only and not the individual sounds produced.

Many think that since consonants outnumber vowels, they require as much or more practical study. Actually the consonant sounds cause less trouble than do the semivowels and vowels. There appears to be less dialectal variation among consonants, and some of them are quite regular in their spelling representation. Because consonants differ from vowels in sonorousness, auditory and oral methods should be dominant in spelling programs.

A third misconception is directly related to the reading program. The whole-word or look-and-say method of teaching reading emphasizes recognition of the entire word as a meaningful unit. If this approach is practiced too long, little or no attention is paid to individual letters, syllables, and minimal pairs. The children who are always encouraged to look at the complete word unit and the beginning sound lack the aids that will unfold the pattern of phoneme structure in our language. Young children can learn structural parts of words that do not relate to word meanings they will be able to transfer to other words. Word lists should be given that follow language structural patterns, then, as well as those that follow word-meaning patterns.

Occasionally a teacher's ideas on individual variation in word spelling attack will be erroneous. She may feel that some students learn solely through visual perception, others predominantly through learning, and still others by that mysterious act of writing and feeling the rightness or wrongness of a word. All these senses should be incorporated into a spelling program; the presence of a more effective sense should not preclude development of the others.

A stumbling block to many effective spelling programs is the misuse of the dictionary, which students are told will give them all the help they need in spelling a word. Accents, roots, syllables, variants, origins, compounds, and authoritarian supplementary information are all found in the dictionary, and a good one is worth its weight in gold. But effective use of this quiet informant presupposes learning *how* to use it. Children should be given thorough lessons on the purpose, history, place, and value of this caged language source.

Clarence Barnhart has included a fine skill-building section in the *Thorndike-Barnhart Advanced Junior Dictionary* on how to use the dictionary profitably. Upper primary-grade children should not have to wait until the eighth or ninth grade to become aware of such a meaningful study aid.

Dictionaries have become commonplace in almost all schools, and in some places are found in every child's desk. But there is still a need for some form of "oral dictionary" to help the child hear the language sounds that cause problems. Since juke boxes have been developed to play hundreds of records at the touch of a finger, why cannot records be made for libraries and school rooms that will handle the major oral problems of our language? Headsets and miniature electrical control equipment would make such an oral dictionary a feasible project.

Probably the worst hindrance to progress in this field is the misconception that everything has been done before and that there are no fresh ideas or methods. This, of course, is not true; many teachers across the nation, as well as in Canada and England, are pioneering major or minor program changes. Classroom teachers may not be aware of their own innovations, and school administrators should actively seek information every now and then about the unique methods being used in their systems. Much is being done, and it should be brought to light so that others striving in the same direction may benefit from comparison with their own efforts.

TECHNIQUES

Teachers should know the various approaches used for spelling instruction throughout the primary grades so that they will have a basis for determining the best pattern to follow. The general practice concentrates on the text or workbook approach from the second grade upward. Special vocabulary is covered daily or weekly according to the here-now needs of the children. The goal of instruction is to correct spelling with learning the meaning of the word subservient to the ability to spell it. Almost all approaches today provide words for spelling instruction selected from the utilitarian need rather than the earlier status list. There have been comprehensive and thorough investigations of the composition of spelling lists. Ernest Horn, H. D. Rinsland, E. W. Dolch, James Fitzgerald and Harry Greene have all contributed to making word lists ob-

jective, rescuing word selections from the whim of individual subjective judgment.

Most adults have consciously or unconsciously learned the habits necessary for correct spelling. Where this ability has not been acquired, the blame is laid on either the methods of instruction or the eccentricity of the English language. There is room to develop approaches that extend the knowledge gained by basic word lists, methods for studying words, and familiarity with interrelations of language meaning and spelling; these approaches might unlock the structure of language so as to provide formulas for its spelling.

That word lists are important is common knowledge, and yet there are many teachers who do not use them soundly. It must be discouraging to tireless workers like Horn and Rinsland to know that the millions of words tabulated and counted have still not been scientifically arranged by grade levels or spelling texts. Some commercial books do give basic word lists as a source for the words included in part of the text, but this practice does not often persist throughout the material.

Teachers who are zealous in their efforts to make spellers of their students may resort to swelling the basic text lists with 10 to 20 more words which they consider should also be learned. The child can and will learn to spell an amazing number of words, but there is a limit to what he can assimilate in a daily or weekly program. From this angle particularly, basic word lists make sense.

Basic word lists that are determined by gross frequency, cruciality, occurrences, geographical spread, difficulty, permanency, and quality have given a high degree of objectivity to spelling content. The need for good word lists for children and adults is as great today as when they were pioneered by L. P. Ayres, Irving Lorge, E. L. Thorndike, Ernest Horn, and B. R. Buckingham, and one of our more pressing problems is to insure their effective use.

We know that we can determine valid and reliable word lists scientifically and select through error count at which grade or age level words should be placed with some degree of success. Given this basis, good spelling instruction should include the following aims.

1. Correct spelling should be made a status symbol. The teacher and the child must both be conscious that correct spelling begins with a positive attitude toward wanting and working for this ability.

2. Each child should be given instruction in a specific and efficient method of learning to spell a word. Methods such as looking at the word, saying each letter of the word, closing the eyes and visualizing the word, writing the word, and checking to see if it is correct are necessary for efficiency.
3. Each child should be made to understand that his spelling instruction needs are unique. Study time should be spent on only those words that he misspells. A personal list drawn from a reliable word list should be used for systematic instruction.
4. Monthly tests for determining general class levels are necessary in addition to personal lists.
5. Only consistent language spelling rules should be given as practical aids to correct spelling.⁵
6. Knowledge of the American language is important to meaningful instruction. Directing children to determine whether the words under study are regular, double-form, or complex is valuable.
7. Knowledge of word structures such as roots, origins, synonyms, antonyms, plurals, prefixes, suffixes, homonyms, contractions, abbreviations, compounds, and usages is very helpful. Word structure is entirely different from language structure which entails stress, sound-letter relations, and silent-word symbolization.
8. It is essential to develop individual spelling programs to fit quick and slow students. Bright pupils should be directed into activities related to language and word structure, while the slower children may be encouraged by a different study approach that includes only instruction in important basic words.
9. Only the number of words that can be successfully attained during the week should be given for study. Inefficient methods of spelling should be identified and corrected. Both oral and auditory instruction should be emphasized in the spelling program.

Any successful spelling program will provide for individual needs and class range. The skill of spelling cannot be left to incidental learning experiences. Repeated instruction will provide the foundations necessary for developing the ingrained habits that should be reached in the upper grades. Those "short, sharp pricks" that make us question the spelling of a word will guide the individual into being an efficient user of language.

⁵ See *ibid.*, p. 264.

Patterns of Primary Reading Instruction

FORM-MEANING (Look and Say)	PHONETIC (Sound Definition)	COMPOSITE (All Types—Look and See)	STRUCTURAL ANALYSIS (Phoneme)
<i>Definition</i>			
Reading is obtaining meaning from the printed form	Reading is obtaining meaning from the printed form	Reading is obtaining meaning from the printed form	Reading is (1) Decoding the written systems. (2) Obtaining meaning from systems decoded.
<i>Point of View</i>			
Whole concept of child, social aspects, and nature of content interrelated	Sound and oral base of language basic to written form	Same as form-meaning pattern	Structural base of English language: (1) different forms of writing, (2) oral base, (3) alphabetical base
<i>Experiences Prior to Instruction in Reading (Speech Facility and Auditory Discrimination)</i>			
Picture reading Context clues Sequence (left to right) Social adjustment Auditory and visual discrimination	Auditory readiness Phonetic analysis (use of whole words) Oral expression Matching Chart writing and reading experiences	Same as form-meaning with some borrowing of audio-phonetic analysis of phonetic group	Knowledge of the alphabetical symbols Teacher-pupil demonstration of writing and reading experiences Awareness of the dominant reading direction for alphabetic writing

Level I

Initial consonants	Understanding of diacritical marks	Combination of both form-meaning and phonetic lessons	Key words for consonants (all words used have a regular value)
Recognition of compound words	Visual discrimination		
Recognition of word forms made by adding <i>s</i> , <i>ed</i> , <i>ing</i>	Picture and experience chart reading	Use of technique to aid instruction (color-spacing)	Introduction of all the regular sound patterns of the English language
Final consonants	Key words for consonant and vowel sounds	Lessons geared to pupil interest	Discovery of regular sound patterns in multisyllable words
Consonant blends	Ways of determining vowel sounds	Comprehension of stories read	
Sound parts of words (<i>ill</i> , <i>ake</i>)	Rules for phonetic principles		Awareness of three forms of language (regular, double, and complex)
Methods for word recognition: (1) context clues, (2) word structure, (3) picture clues, (4) sound structure	Comprehension of stories read		Emphasis on oral decoding
Comprehension of stories read			

Level II

Recognition of long and short vowels	25 or so rules on individual sounds, diphthongs, and blends	Same as form-meaning Emphasis on silent reading	Method of word attack: (1) spelling, (2) matching sounds, (3) sounding out known patterns, (4) minimal pairs
Word structure (roots derivatives)			Lessons on double forms of English language
Principles of syllabication			
Dictionary skills			

Level III

Reading for expression	Same as form-meaning pattern	Specific lessons on words <i>a</i> and <i>an</i>	Lessons on complex forms of English language
Stress on silent reading		Abbreviations	Comprehension of language structures
Reading comprehension		Compound words	Review of simple, double, and complex forms
		Contractions	
		Punctuation	

Reading

Political campaign issues are child's play when it comes to the hot debates surrounding the issues of reading instruction among professional educators. Even though cool thinkers in this as in any field caution that research is more fruitful than debate, the argumentative activity persists. Experimental research will nevertheless be carried on for the purpose of seeking information and verification, but because of the difficulties encountered in designs, variables, and measuring tools, a great deal of "temper, temper" will probably be displayed in the study of the problems of reading instruction for some time to come.

If we could lift the haze that surrounds the reading problem, we might discover that four more or less distinct patterns for instruction exist in school practice: the form-meaning pattern, the phonetic approach, the composite pattern, and structural analysis. These four patterns involve the historical as well as the experimental insights that have been brought to bear on the subject.

The preceding chart attempts to compare the four patterns and show the points of agreement or disagreement. Students interested in the chronological evolution of reading methods may read about intrinsic, phonic, analytical, and ABC approaches. Traces of these methods are found in the four patterns given here.

As one discovers the similarities and differences among these four patterns, certain definite points emerge. The structural pattern makes a two-point definition of reading. Three of the reading patterns use sight words as a base for instruction while the fourth uses knowledge of the alphabetical names. The casual reader may find that the programs seem to agree rather strongly, but the critical reader will observe that in basic issues there is monumental disagreement. For example, the timing of certain word-recognition and meaning lessons differs greatly. A game is often lost because the players' timing is poor, and so may reading proficiency when the pattern of a reading program shifts into a completely different approach as the result of instructional timing. This may be observed in the teaching of the alphabet. Some patterns withhold this training until the upper primary grades while others begin it earlier. It is wise to remember that the timing, or grade placement of lessons characteristic of patterns,

is as important for success as other aspects of the program. A well-timed lesson is worth two lessons that merely occupy clock periods.

Primary reading instruction in our schools has reached the stage of disease. This disease, so badly treated by folk cures, offers a challenge to those who believe that not everything is yet known about language and reading instruction. Reading is so fundamental to civilization that the profession's obligation to constantly improve and seek out more effective teaching methods cannot be denied.

Problems in Teaching Reading

There are four key points to this ideal goal of teaching reading to all our children. The first lies within the adult's field of knowledge: do teachers and adults know the composition of language and its writing? The second problem concerns the pattern of instruction selected for use. The third deals with the individual and class reading growth, and the fourth, the most evasive of all, is the question of training children to select good reading material. Any attempt to find solutions for these problems, even if only partly successful, will help the next generations. The first point places responsibility on adults by requiring them to see the value of a general education in linguistics. Many of the following statements and explanations will prove thought-provoking and will help clarify the problems facing the teacher who is presenting primary reading instruction.

STATEMENT

Written American language has a sound base. The writing of American is not a clear one-to-one relationship to the oral language.

Writing exists in various forms in our present culture.

EXPLANATION

Children acquire speech communication long before the skills of reading and writing. To decode the written form, the child does not need instruction in sound production but rather in which sound has been conventionally assigned to a certain written form and practice in recalling that knowledge.

The child can and should be instructed in learning to read the multiform systems in existence today. Aside from the alphabetic foundation, he needs to recognize the remnants of picture and word writing as discussed above.

STATEMENT	EXPLANATION
American alphabetical writing has three distinct patterns.	American written words are made up of (1) <i>simple patterns</i> (man, leg, pan, gun), a letter symbol standing for each sound value, (2) <i>double patterns</i> (well, room, tea, she, that, toad), which have consistent value for double consonants and digraphs, and (3) <i>complex patterns</i> (time, rhyme, sale, though), which have silent letters and irregular spellings resulting from language evolution.
Auditory ability is of basic importance when making the transfer to reading.	Oral ability is acquired in the preschool years. The phonemes that a child will select have been established in his primary social group. The auditory ability will constitute the area that will need training. These six ordinal steps are characteristic of normal development: (1) oral, (2) reproducing, (3) mental, (4) mental symbolizing, (5) visualizing, and (6) recalling and comprehending.
Language structure and word structure are two different methods of word recognition.	Word structure refers to factors such as (1) roots or derivatives, (2) prefix-suffix, (3) compounding, (4) contraction, (5) abbreviation, and (6) modification, (<i>ly, ty, s, ed</i>).
Phonic rules and structural language analysis are not the same.	Language structure refers to (1) writing form, (2) sound pattern, (3) visual pattern, and (4) meaning base. Phonic rules are generalizations that are made from written forms. These rules are implied after the development of oral and written language. Some phonic rules are not consistent with all word structures.
	Structural language analysis involves language bases, evolution of languages, and cross-fertilization of languages.

STATEMENT

The direction of reading instruction is from the oral to the silent.

The American language has a limited number of signaling sounds.

The signal system of any language has meaning. However, this meaning of the signal is not fixed and quite often there are a number of meanings.

In all written material, three types of meaning are involved.

Language knowledge as stated and explained here is not profound or even beyond the capabilities of many bright primary children.

EXPLANATION

The child does his first reading aloud. Under social pressures his reading is reduced to a whisper and finally to inaudible movements of speech. Mature reading is non-visible or internal substitute mental reactions. The adult must, under extreme conditions or with difficult material, go through the oral-whisper-internalizing process.

This internalizing is a slow learning process and should not be forced on the beginning reader before he shows signs that he can cope with the practice.

The significant sounds of a language are called phonemes. The variations of these utterances used in combination with others are called allophones or phoneme variants. The American language uses approximately 43 phonemes. The written form uses only 26 symbols to recall or redirect the 43 language sounds.

Book, for example, has several alternate meanings—"to speak by the book," "the Book," and "to book passage."

To acquire adequate meaning from any written form of language, the reader should understand (1) the meaning of the writing system, (2) the meaning intended by the writer, and (3) the meaning furnished by the reader's own mind.

Critical meaning of the language requires the reader to understand the limits of the written form and the limits of the writer.

Large gains in effective reading or meaningful word recognition lessons should result if we take advantage of the information that such men as Leonard Bloomfield, David Diringer, and W. Nelson Francis have presented in their work on the structure of American English.

The problem of determining which of the four patterns to use for reading instruction is fundamental to organized reading education and should be considered by all primary teachers and school administrators. Reading cannot be treated with skill handling in the short span of the primary years. The nature of the content as well as the nature of the child's learning processes predetermine that reading instruction must be given foundational treatment.

The choice of texts, individual class approaches, and sequential units should be chosen with the understanding and acceptance of all primary teaching personnel. Because primary teachers are trained in so many different schools and because the number of years of teaching in one school varies so greatly, it is imperative to review the direction and pattern of reading instruction yearly. Annual review prevents many odd practices from arising. Without it, some teachers may come to use an instructional pattern that nullifies the teaching of their colleagues. Intermixing of various programs may also misdirect young children. Just as schools should agree on handwriting teaching practices, so should they on reading instruction.

The third problem is the two-pronged question of choosing the best type of instruction for both the individual and the group. The individual is the heart of all instruction, and yet for reasons of efficiency and motivation, group instruction is invaluable. Much that we consider for the individual runs counter to what we do with the complete group. Some basal programs try organizational techniques for training individuals by establishing three or so homogeneous groups for instruction; others encourage, through their teacher manuals, flexible groups that may be determined by sociometrics, word comprehension, oral ability, social maturity, and organismic age. Actually, the philosophy and direction of the organization necessary for teaching the individual within the group framework is determined by the teacher with the aim of creating the best environment for unleashing the mental and motor tools she finds in her class. Every now and then, review is necessary to assure that learning is progressing at the pace and within the scope desired.

Reading instruction, of course, is not encompassed by the solution

of these three problems. It is not successfully absorbed by all children upon exposure, even though we attempt to learn as much as we can about linguistics, the model to follow, and the arrangement necessary for economical teaching. Reading acquisition is an individual act, and children who mature late or those who have experienced extreme preschool deprivation may not become normal readers in the time provided by the primary school.

There is a collection of causes and reasons that hamper reading ability, and not all of them are found within the young child or primary social group. The major difficulty lies usually with our viewpoint. We quite often confuse the most difficult form of writing—alphabetical—with other forms. Perhaps the late maturer should remain at picture or idea reading longer. Perhaps we need to look at the sequential experiences we provide for children in our reading program.

Assuming that effective reading instruction is being given, there still remains the fourth problem. The task of injecting into children the desire to read with critical judgment and select worthy printed material is a difficult one. Adults do not always accomplish this goal themselves, but there should be some conscious effort to give each new generation better tools than existed in the past. Perhaps the problem of selection must divorce itself from writing forms or styles, or even children's present interests, and cluster instead around *ideas*. Suppose we consider training children to want to read for ideas, not only for comprehension but by recalling similar experiences. Going further, suppose book lists and basal readers arrange their material not by subjects or topics but by concepts, such as the basic themes which separate man from the lower orders of life—communication, love, freedom, and the individuality. Constant questions or directions to pupils emphasizing the comparison of different persons' writing might encourage critical selection. Allowing children to observe that a story appearing in the text is a folk story with various versions is a step in the development of judgmental thinking.

Primary reading instruction may well include inference lessons along with the meaning of the written system and the words read. Inference lessons directly aid children in corroborating similar thoughts and classifying ideas read with ideas gathered from other sources.

Any additional critical types of work which we intersperse in reading instruction will bear dividends when the child matures into a reflective reader. The most effective tool for instruction in critical reading is reading quality stories to children daily. Selecting award winning stories and double starred books listed in Children's Catalog aids in developing critical standards in both the teacher and the children.

Techniques

The knack of good cooking sometimes rests on the excellence of the ingredients used and sometimes on the recipe followed. So is it with reading. The recipe may be the well-designed pattern and the children the excellent ingredients. Yet, just as with cooking, there is one other factor missing; in both cases, there must be an artist at work. A mere flick of the wrist or the tiniest pinch of a spice may make a dish fit for a king, but the teaching techniques of the artist-teacher involve a great deal more.

Understandably, the teacher's daily techniques should complement the material under study as well as fit the pattern and the individual variations in the children. The field of reading instruction has accumulated many techniques which have evolved into activities or experiences merely because of their age; after a while we assume that they are essential and consider them permanent fixtures. Each primary instructor should look at a list of these activities and decide for herself which ones are best suited to her needs. Such occupations as making experience charts, reading games, telling and dramatizing stories, copying words, playing sequential games, reading pictures, looking at bulletin boards, listening exercises, choral reading, recreational reading, labeling, using word drill cards, silent reading exercises, speech correction exercises, using work sheets, constructing notebooks, and dictionary exercises all should be chosen only when they satisfy the criteria of the pattern of reading instruction and when they are needed by the specific class or situation. The teacher may test these activities by asking herself:

1. Does the activity have meaning to the individual and the class?
2. Does the activity provide meaning or illumination for the material under study?
3. Can the child see the purpose and direction of the activity?

4. Does the technique or activity have a range of difficulty to cover the capabilities of the group or class?
5. Are you, as the adult directing or suggesting the activity, definite in your own mind concerning the specific value the activity has for the reading program at the time it is being used?

Quite often lists of criteria like this one are learned but never applied to the daily program. These five ifs are of real importance, and merely committing them to memory will not produce the goal. The reading pattern that a classroom teacher uses will determine the amount and direction of the selected techniques. The teacher is urged to beware of becoming involved with techniques or favorite activities that can, because of overuse or misapplication, nullify the reading program. Perhaps the reader knows of problems and situations which may occur in spite of the earnest belief of the instructor in her reading pattern and selection of techniques.

Reading is far too important an area for the school to jam it into a patchwork quilt project. Even though clear and concise programs have been established, the variability in school practice shows that we are not clear in our application of what we know or organize. Reading is to the child what the Bill of Rights is to human liberty, and each generation will need to read more critically and widely in order to enjoy our expanding culture.

Numbers

The one subject area in which the scientific method of thinking has had a beneficial influence is that of numbers. The major texts in this area make common use of the observation and exploration approach in scientific methodology, and their titles incorporate terms like *self-discovery*, *structuralizing*, and *problem analysis* that show up as well in the daily computational and number thinking activities which the manuals direct the teacher to use with the pupils.

Primary arithmetic instructional texts have gone further than most of us as teachers, because we do not consider that many ideas in the past were learned by a normative drill pattern. Children obtain insights into numbers faster than do the directing adults because they do not have to unlearn earlier lessons.

Primary teachers and students will benefit by using scientific ex-

ploratory methods in the multiple approaches to arithmetic problems. Numbers have developed from the common reservoir of past cultures. The history of numbers does not belong to kings but to the common man, who applied common sense to his problems—a term which in reality developed because it stood for a trait common to so many minds. Past patterns of arithmetic instruction became so involved with “one wayism” and complex solutions that much understanding of the root or reason was lost in the shuffle of ciphering.

Arithmetic is another form of writing which has a universal concrete or idea base rather than a sound base. Learning to use numbers is learning to see relationships with tangibles. In manipulating numbers, children gradually learn through multiple possibilities that numbers are shorthand symbols for breaking things up and putting them together again.

The social value and everyday use of numbers has been stressed for a number of years in our teacher training courses and texts, a utilitarian viewpoint that has prompted many capable writers to produce everyday instruction for the realm of numbers. Herbert F. Spitzer, L. J. Brueckner, Henry Van Engen, Catherine Stern, Robert Swain, Foster Grossnickle, W. Jessie Osborn, and John R. Clark are a few who have developed unique and meaningful directions.

Numbers have become so valuable to living that it is wise for adults to do some rethinking about number systems and their operation. The teacher should recall and reflect on properties she will want to be certain are given the foundational treatment needed from the 4-year-old through the upper-primary levels. She may test her information on the elements in the number system by checking the following list. Any topic which she does not feel completely comfortable about is one which she should review in one or more of the good texts in the field.

Number System Topics

One-to-one relationship. Numbers are not found in objects and things; they are imparted to definite objects or ideas by man. Man has used this relationship of one thing to another as a concrete method for eliminating vagueness in experiences. A number, then, is a way of thinking about an idea or thing. Historically, numbers were first a relationship that began by equalizing. A hand symbolized 5, a clover 3, and a deer with four legs the idea of fourness. With this in mind, there is no reason to limit the upper range of

counting ability. If children can learn to count by discovering the 10 base, why should they not count on and on with pleasure?

Counting. The process of putting a number word to a series or group of things to obtain a quantity or an order is counting. Counting is the oral base of a number system. To achieve rational counting, children will use rote counting as a first-level preparatory agent. Any directed lessons and liberty-time occupations with materials or activities that use rote and rational counting contribute to sound arithmetic instruction. Rope jumping and accompanying counting rhymes, Mother Goose and other counting jingles, ball bouncing, and number finger play will provide activity for counting. Direct contact with cash registers, telephones, abacuses, hundred boards, dominoes, and adding machines will prompt rote and rational counting.

Grouping. The ability to know a number of objects at a glance is grouping. The act of grouping consists of rearranging or building numbers into large units for ease of recall. The process of grouping has several stages: enumeration, which is counting to determine the group; identification, which is recognition of the size of the group; reproduction, relating the group to a similar order; and comparison, noting similarities and differences.

Place value. The position that a number holds in its written form determines its value. The digit 1 resting alone on the blackboard is a single unit, but when found enumerating the eleventh day of a month on a calendar, it assumes a different value—one digit becomes 1 and the other digit becomes 10. Teachers should be careful in reading numbers in the primary grades to prevent the children from placing the wrong value on them. The order of a house number has nothing to do with quantitative value, but a date or money number carries value with positional placement.

Tally marks and numerals. The development of the written form of numbers has given us tally-mark checks, Roman numerals, modern style, and conventional symbols. The child who has difficulty in remembering the quantitative aspect of a numeral may see meaning in a visual representation such as is given here. Some writers state that there is nothing characteristic of the numerals from 5 to 10 that suggest the one-to-one relationship; others feel that a relationship may be found. A suggested explanation of the latter theory is given here and may prove of some value in the classroom.

Digits. The fingers and toes were the early easily transported

= 1			one
== = 2	or = 2		two
=== = 3	or = 3		three
□ = 4	or = 4		four
□ = 5	or = 5		five
□ = 6	or = 6		six
□ = 7	or = 7		seven
□ = 8	or = 8		eight
□ = 9	or = 9		nine

abacus. Also, the digit width became a unit of measure— $\frac{1}{4}$ inch, for instance. Ten fingers may well have set the 10-base ten concept, fingers and toes a 20-base system.

Tens. This is the name applied to the group of single units amounting to the total of 10. *Tens* became a name for a group that fits the number base and makes it easy to remember. Two 10s equal 20.

Bases. The root or core of the numbers we use is 10. This system of repeating and compounding numbers in groups of 10 makes the writing of quantity a matter of learning ten different symbols and the place-value organization.

Cardinal-ordinal. The value a number has in the system refers to the cardinal quality. The number 6 has a value of sixness or 6 things. The ordinal aspect of a number is the position or order that it represents. Sixth, fourth, and other ordinal names signify the positional place and not necessarily how many.

Estimate. The act of forming a judgment regarding the value, order, size, or amount of something is estimating. This ability of sensing group sizes and judging or approximating figures may have some individual characteristics, but the development of the ability facilitates an understanding of certain number processes, for example, division.

Facts. The basic facts as understood in arithmetic are all the possible arrangements of two one-figure numbers from 1 to 9 inclusive. If 0 is excluded in arranging the numbers there are 81 basic addition facts and 100 if 100 is included. Often these basic facts have been subdivided into easy and hard classes. The easy facts have numbers less than 10 and hard facts minuends larger than 10.

Ratio. Ratio is the relationship of one number to another number. In the number 615, the number 6 has a ratio of 100 to 1 in comparing 600 to 5. The number 1 has a ratio 10 to 1. In reverse value the 5 has a ratio of 1 to 10 and 1 to 100 to the other numbers in the number 615. This ratio property makes the number systems contain a decimal principle.

Zero. The symbol 0 is used to occupy a position of a number when no quantity exists at the time. Zero does not necessarily signify *nothing* but has relative properties that make it common with whole numbers and integers.

Set. The mathematician's collective noun for the numbers making up a class or group is *set*. Sets may be broken into subsets or empty sets, or arranged in matching sets. A set should be thought of as a mental picture that directs the problem-solving process.

Notation. Notation is a method of recording quantity. The Hindu-Arabic that is in dominant use has 10 different symbols for broadcasting all quantity.

Schematic representation. The concept that small units can represent much larger units is schematic representation. A half-inch can represent a mile, a picture of a box can represent 500 crates. Schematic representations should always be thought of as substitutions.

Processes. The series of progressive or interdependent steps which direct a person's efforts toward a predetermined end are known as processes. Arithmetic is often divided into addition, subtraction, multiplication, and division processes.

Decimals. Decimals are an extension of writing numbers in denominations of 10 and the power of 10.

Unfortunately, most kindergarten and first-grade teachers feel that arithmetic is a formal subject, and because they often confuse subject content with technique, they abandon any meaningful foundational instruction in the area.

If primary teachers could conceive of numbers as economical ways of thinking and each day provide opportunities for the child to learn their properties, we should be a long way in improving our treatment. The basic concepts of numbers are found in the everyday experiences that adults plan as instruction for the young. Counting fingers, memorizing Mother Goose counting rhymes, learning counting finger play, and furnishing juice glasses for class members are but a few of the ways in which the teacher may provide worthwhile opportunities.

The adult who plans these uses of numbers should guide the occupations into various number manipulations. Learning to count to 10 is only a fragment of foundational experience and should not be set as an artificial limit for a given age group.

Early teaching of numbers should accomplish these ends:

1. An awareness on the part of the child that numbers are easier to think with than descriptive words or phrases.

2. The knowledge that number names are given to articles, objects, and quantities. These names are only substitutions for ease in handling.
3. The understanding that counting is the prime number process by which the child will arrive at the number name of a group.
4. The ability to rearrange objects into groups which will help to identify numbers.
5. An awareness that certain terms contain number ideas and should have standard or approximate meanings: large, small, odd, even, take away, borrow, add, big, little, count, few, more, less, measure, fact, short, long, sum, product, and set.
6. The knowledge that the writing of numbers can take various forms, such as tally checks, number line grouping, and enumeration.
7. The recognition that the various cultural applications of numbers do not have the same number base and are not extensions of the 10-base system: calendar, clock, speedometer, coins, adding machines, and measurement methods.
8. A recognition by children of the place of numbers in civilized life.

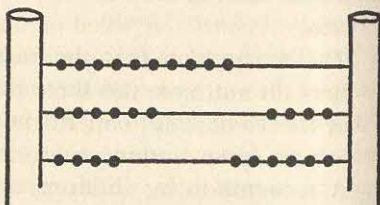
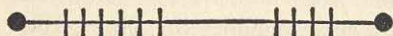
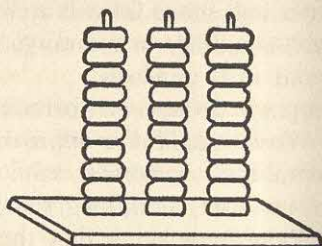
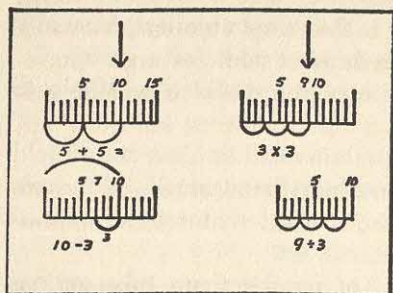
On the opposite side of the coin, instruction is sometimes inadequate because primary teachers are not aware of the many teaching devices and techniques that help make arithmetic manipulation meaningful. Sometimes also the concrete device or game is little understood by either pupils or teacher, and its presence in the room has little value.

Catherine Stern has developed a series of unit boxes and corresponding materials following the approach pioneered by Maria Montessori. Though the material includes clues such as color or shape which are not related to the number concept, it provides productive foundational experiences. Teachers should become acquainted with the many devices they can buy or make themselves that help form ideas about numbers.

A basic list of suggestions for equipment, techniques, and activities which may be used in the primary grades is given below with brief descriptions for their application.

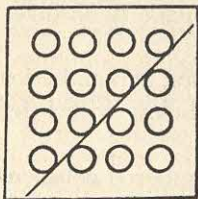
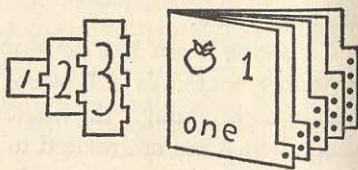
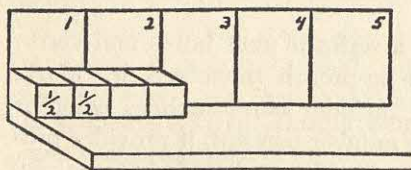
Number line. A line divided into equal units numbered consecutively. A number line is a graphic article that can be used to show

all the basic processes from a counting base. A number line with fraction blocks is also useful.



Abacus. A contrivance consisting of beads or balls that are used for counting. Several forms of the abacus are available commercially; or one may be constructed easily by the teacher.

Number matching devices. Cards or word blocks that show various representations of numbers and the one-to-one representation.



Number dictionary. A book made up by the class or a pupil containing a record of all the ideas discovered about numbers.

Fact charts. Large tagboard charts showing the number facts in graphic representation.

Number stick. A counting rule that works like a slide rule.

Number pocket. A cloth or wood device that uses the “open-end” principle to show the grouping of numbers.

Calendars. These instructional aids are made in so many forms that teachers will not find it difficult to find a suitable one. Movable dates and space for pictures and words are useful features. American schools do not make general use of the daily or weekly calendar in the primary grades, although such devices are quite appropriate for the early primary child.

Workbooks and work sheets. Some individualization can be accomplished with well-developed lesson sheets that follow number experiences.

Number cards. Heavy tagboard 3×5 cards that represent the numbers 1 to 10 in various patterns.

Hundred chart. A wood or tagboard chart that has the numbers to 100. Two forms of this piece of equipment exist, and teachers will discover the value of each through use.

Measurement and weight instruments. Thermometers, scales, measuring spoons, cups, rules, yardsticks, clocks, slide rules, protractors, height lines, dozen cartons, liquid measures, and the many other everyday articles that will prove useful for activity throughout the day from play in the sand boxes to use in the demonstration period.

Miscellaneous equipment. Dial telephones (real and play), street numbers, counting stones (corn), measuring tapes, pedometers, sundials, shadow sticks, candle clocks, timetables, shoe-size measuring sticks, bus tokens, rainfall gauges, clinical thermometers, cooking thermometers, and foreign coins.

Techniques

Equipment represents the concrete objects that are handled in experiencing number work, while techniques are the ways in which these objects are presented for manipulation. The orderly use of equipment is as important as the tangible objects themselves. The first inquiry that an adult makes when dealing with young children concerns techniques: “What do I do?” or “How do I introduce this idea?”

Even though a teacher acquires effective methods, there is still no guarantee that her students will successfully learn the principles of arithmetic. True knowledge of the subject, which relies heavily

on insight into the relationship of number processes, is still half the battle. With a firm assurance that she possesses that knowledge, the teacher may then turn to the second task of foundational instruction, that of on-the-spot and prepared problem solving.

Pupils identify and assimilate an idea or system more easily if it is placed in a problem setting. A child who is told to count those drinking milk, even if he has difficulty in reaching the cardinal number result, is in a better position to realize the need for accurate counting, and to gain insight into ways of keeping the pupils in order to facilitate counting than one who has no immediate problem to solve. Whenever possible, children should be involved in situations requiring solutions before demonstrations or questions are used.

Daily arithmetic periods which begin to appear in the upper primary grades may well be divided into sections of (1) assignment, (2) preworking of assigned problems without teacher guidance, (3) discussion of student or teacher work on the blackboard after several minutes of individual work, (4) resumption of individual work, (5) individual contact in which the teacher goes around the class identifying pupils' individual problems and selecting some work to be transcribed on the blackboard for class observation, (6) explanation of blackboard work and class discussion of it, and (7) quick oral arithmetic problems that may be solved by both sharp and less sharp students. Three or four progressively more difficult mental problems will quicken the class spirit.

A technique that should receive attention is the personal approach to the lesson—there is great value in the teacher's involvement as a person and not just as a teacher. Such an approach explores with the child either one or multiple ways of seeking solutions. A child who watches the process a teacher is using to arrive at a solution and notes that it is different from the one he is using will experience the thrill of seeing arithmetic in action.

Fundamental to all teaching is the recognition, as we have said, that understanding should precede or parallel practice drill. If practice is focused directly on a process that is understood, little time is lost in learning. The problem of techniques to be used in reaching each student may be served, as Herbert F. Spitzer writes, by having "pupils work on the same area in arithmetic with distinct

provision for different levels of work in the area," and handling any differentiation in the area of instruction on an individual basis.⁶

These and other techniques may be used to direct the arithmetic program, and the many helpful suggestions in textbook manuals will more than supply the teacher with sensible approaches. Provided the teacher is working from a firm knowledge of the area herself, the art of teaching mathematics consists in choosing the best techniques and then selecting or providing activities that will involve problem and arithmetic process manipulation. Unfortunately many persons believe so firmly in the foundational value of games or experiences that incorporate numbers that more basic treatment is neglected. Many of the activities permitted in our primary grades because they involve numbers have limited foundational use. All too often games like hopscotch or jacks involve the child in the emotional side of the competition rather than in the mental arithmetic process.

Activities such as the following are of greater value for the child since they focus his attention more closely on using numbers.

1. Finding out how children barter and noting the similarities of this trading system with that of the American Indians and their contemporaries.
2. Counting the number of place mats, scissors, or crayons needed.
3. Keeping records of children's birthdays and other special days on a lineal calendar.
4. Making a weather chart complete with temperature range.
5. Estimating the size of rooms, persons, and articles.
6. Constructing a map of the local school or neighborhood district.
7. Using mental arithmetic occupations. Here is an example: A fish's head is 4 inches long. His head is as long as his tail and half as long as his body. His body is as long as his head and his tail. How long is the fish?
8. Constructing a water clock that keeps as accurate time as a mechanical clock.
9. Discovering the difference between checking a problem and proving a problem checked. The activity of proving several sample problems in a lesson insures understanding.

⁶ Herbert F. Spitzer, *Teaching of Arithmetic*, 2nd ed., Houghton Mifflin, 1954, p. 403.

10. Folding and cutting or tearing paper into fractional parts.
11. Keeping a number diary. The class or group records all of the uses that are made of arithmetic in the classroom or at home.
12. Viewing and discussing films and film strips that are especially designed to provide (a) historical background of an arithmetic concept, (b) interpretive enlargement of an arithmetic concept, or (c) a demonstration of the place and value of arithmetic.

Such activities require orientation and continuity and a knowledge of the content field if they are to blend into a successful foundational program of arithmetic. The treatment would be incomplete, however, if children were not given some instruction in the vocabulary related to numbers. Ways should be sought to introduce and explore the meaning of specific terms (ounce, pound, minus, quarterly, sum, equal, plus, product, quotient, remainder, times, total, column, difference, invert, cancel, and add) as well as marginal words (big, little, breadth, height, bill, cash, discount, bargain, length, space, high, low, net, loss, less, change, worth, deep, shallow, and per).

Arithmetic is man's tool for taking the guesswork out of ideas, and the young must learn the habits that will focus their mental energy. New frontiers are opening up in the functional use of numbers. Those of our children who help send man to planets beyond will have been given a firm foundation in arithmetical ideas such as accuracy, sets, number pairs, and structures—and taught to yearn for more.

Physical Education

Tell an American that his child doesn't compare favorably with his peer in Europe and the adult blames the school and its program. There seems to be a direct relationship with life expectations—between achievement and school curriculum. As an educator, one becomes discouraged in the difficult task of guiding the young in the wandering directions taken by community and national culture. The area of physical education is caught in the uncertainty of these on-and-off-again values and shows signs of losing its objective aims. Through the years physical educational programs have been characterized by either loosely defined terms or overgeneralized goals

with the result that primary teachers have been known to have their pupils sit out recess periods to rest their tired blood!

Recent work by the President's Council on Youth Fitness has brought to light many organized programs in operation in various sections of our country.⁷ This alert should be heeded by the education departments of all the states. Practically all the studies show that a carefully planned daily physical educational program will bring results in improvement of individual fitness with only a small investment of time and equipment. Therefore, the task is to discover the program which best defines and develops fitness.

Overgeneral definitions of fitness which imply that a great deal of transfer is possible from one physical activity to another are unrealistic. Fitness programs must be specific and performable, and should aim to develop the child's ability, agility, and endurance while allowing no undue fatigue. Any measurable softness of American youth may be blamed on our cultural tastes first. Encouraging children to ride rather than walk, sit instead of stand, look on instead of participate, and be watchful of their physical proportions only in adolescent years rather than all through life is an indictment of the family and the adult population.

American primary physical education has had a peculiar evolution. In most of the nation, physical education in the kindergarten and first grade at least is still directed by the room teacher. The upper levels of the primary grades may receive two or three weekly sessions with a special teacher. The influence of European notions of physical education is evident. The English have given us the concept of games and dances for the lower level, the Swedish have suggested a mild form of calisthenics, and German thought has reintroduced endurance. Americans will do well to take a long look at some of the ideas that have been formulating in our own universities. Certain women's divisions of physical education departments have arranged programs that care for the individual while giving group activity.⁸ Other experts divide the program into three areas and suggest activities for each area. Evidence is mounting that our schools are giving physical fitness the necessary attention

⁷ Hans Kraus and Ruth P. Hirschland, "Minimum Muscular Fitness Test in School Children," *Research Quarterly*, 25 (May, 1954), 178-188.

⁸ For example, the research on the physical activity of children directed by M. Gladys Scott, Department of Women's Physical Education, University of Iowa.

at the primary stage to unleash the potential of the young. However, not all schools realize yet that they must provide time for a systematic program, equipment for large groups of children, and direction under special and classroom teachers so that every child will be active during the physical education period.

The physical educational program should provide (1) endurance and strength, (2) muscular projection, and (3) body agility and flexibility. It should not be confused with the health, safety, and social appraisal programs that also provide for continuing development; we will discuss these briefly in a moment. Each primary teacher should have a repertory of activities that would develop the child's body in these three areas.

Endurance and strength involve the tasks common to everyday occupations, motor pursuits such as running, modified chinning, jumping, set-ups, gripping, pulling, and climbing. Teachers must guard against allowing the short daily periods allocated to the physical program to become merely game times, when all too often the larger number of children in the group stand passively observing two or so engaged in motor acts. Games that involve teams chasing each other, for instance, should be used in preference to the more standard touch or squirrel-in-the-tree tag. Apparatus such as ropes, swings, mats, and horses will encourage children to pursue the courses of climbing, rolling, chinning, and tugging. Reviving interest in tug-of-war, Indian wrestling, tumbling, exploring, and hoop manipulation will find eager participants. Programs that enlarge on rope-jumping ability and introduce snake-rope jumping, jumping the ditch, and jumping with sticks will stimulate the child's out-of-school activities.

The muscular projection part of the program involves speed and thrust. The ability to push and throw balls and objects and to move the body up, forward, and around is a separate part of a fitness program. Children should be directed to improve their muscular thrusts and to attempt some form of projecting their bodies each day. Modified forms of handball, pitching, hand batting, and catching will provide valuable exercise. Simple measures such as the Sargent chalk jump or leaping the distance of the child's height from one foot to the other provide easy methods for checking muscular projection.

Flexibility and agility activities are essential in our suburbaz

and urban environments—if only to dodge autos and supermarket carts! Engaging children in reaction-time activities that involve balance, coordination, rigidity, flexibility, and rapidity in adjusting should have the young bursting with interest “to do it again.”

Possible activities that will involve the maintenance of these three areas are given below with the hope that more will be added and that a program containing both direction and variety will be presented to the young.

1. *Tip top* (agility and flexibility). The child stands with feet together, springs into the air and attempts to turn completely around before landing.
2. *Jump the brook* (endurance and balance). Two long parallel lines are drawn 2 feet apart to represent a brook. The squad starts 25 or 30 feet away from the lines, runs, and jumps across the brook to avoid getting the feet wet. Gradually increase the distance between the two lines. The activity can be modified by drawing stones in the brook at varying distances. Children are directed to walk on the stones in order to reach the end of the brook.
3. *Rocking chair* (endurance and strength). Two children hold hands and sit on each other's feet. As one child leans back, the other raises himself forward, putting his weight on his feet. The children then reverse the procedure.
4. *Eskimo roll* (endurance and strength). One child stands with his feet on either side of the head of a child lying down. The child on the floor brings his feet up, the other one leans over, and they grasp each other's ankles. The child standing does a somersault between the legs of the other child, pulling that child with him until the positions are reversed. This is repeated several times.
5. *Hand wrestle* (strength). Two children stand and place the outside of their right feet together and grasp right hands. At a signal, each tries to make the other move his foot by pulling, pushing, or jerking the other's right hand.
6. *Heel click* (flexibility). The child jumps into the air, gives the heels a click, and lands with feet apart.
7. *Grapevine* (agility). The child stands with heels tightly pressed together. He bends down, extends both arms down between the

knees and around behind the ankles, and holds the fingers together in front of the ankles without losing balance.

8. *Thrust sit* (strength). In standing position, the child crosses one foot over the other, extends his arms sideward, and sits down on the floor without touching his hands to the floor for support. Then he stands up without touching his hands to the floor for support or losing his balance.
9. *Chinese get-up* (strength). Partners of approximately the same height and weight sit on the floor back to back, elbows hooked and feet drawn up close to the body. Each pushes against the lower back of the other, and the pair rise and stand. They then sit down without moving their feet.

Some fanciful notions and questions prevail about physical fitness and the physical education program. These should be brought to the front for discussion in order that the program may be directed and defended.

Will children harm themselves through group physical activity? If the child is physically sound, he will quit when he becomes tired. There is no evidence that strenuous exercise is harmful for children provided they are in good health and have good nutrition.

Is it harmful to have physical activity after a meal? Strong excitement retards digestion, but exercise or physical activity do not interfere with it.

Will planned exercises lengthen the young child's life? There is no real evidence that exercise shortens or lengthens life—it merely keeps the body in prime condition.

Will regular physical activity help increase a person's resistance to diseases? Viruses and bacteria have no relationship to activity. Diet, rest, and mental health help ward off diseases.

Is poor posture a sign of an unhealthy body? Poor posture crowding the lungs is meaningless but body tone is involved in postural positions. The body should react as a unit, and when a position interferes with movement or makes it nonrhythmic, it results in misused effort and energy.

Some time during the day should the child relax by being absolutely still and quiet? The body needs relaxation but this does not necessarily mean stillness or motionlessness. Wiggling, laughing,

stretching, and yawning are ways of relaxing and permitting the flow of blood.

Outdoor air, because it contains more oxygen, invigorates the child. Indoor and outdoor air are similar in oxygen content. Temperature and activity differences cause the invigorating condition. The confines of indoor space limit activities while outdoor space encourages movement.

Should physical education instruction stress social development? Individual awareness and the opportunity to use this period as a time to remain fit and understand fitness is the main goal.

Should games and physical activities be selected according to their out-of-school use and children's interest? This is only one method of selection and should apply only when the activity or game has been determined by the special directors to contain the ingredients necessary for the program.

Is it sufficient for primary children to know the physical education program only as the time for games and active movement? The child should not be left to understand that a game is the same thing as a planned program. Games, because of their nature, involve emotions which should not color the purpose of the foundational program. Children should be instructed orally and by demonstration, in the knowledge that physical education has various parts. Checking the three areas should keep children aware of the reasons for having a planned program.

Physical education, even for the young, does not solely comprise loosely organized or low-level games. This short but daily planned period should be devoted to developing the children's physical efficiency to a maximum. The physically fit child should have balance, good posture, endurance, speed, strength, quick reactions, agility, and efficient body mechanics. Teachers and school administrators should plan their programs with the following considerations in mind:

1. The primary grades should have two 15-minute periods or one 30-minute period daily. Recess time is *not* to be confused with the time allotted for physical education. Primary children, from kindergarten up, need physical education instruction as well as relief or rest periods.

2. Instructional programs must be geared to the individual through group organization.
3. Programs should have a balanced pattern. Body mechanics, stunts and tumbling, games, dance, and demonstrations should all play a part in the yearly program.
4. Foundational treatment should be given to these three aspects of fitness, while the health and safety subject division needs impressional treatment. In some communities stronger emphasis than impressional treatment may seem to be warranted. All too often, however, the primary child is being informed about health and safety concepts that are beyond his experience level or his control. The young child cannot determine the selection of his diet—this is still in the hands of the family. School health discussion can only impress the young with the variety of foods that should be eaten. The same situation exists in connection with other health problems for which the child cannot be held responsible.

Surveys of community health programs and problems may be delegated to upper-grade social studies instruction.

Teachers should take care not to use the technique of persuasion on health and safety topics. Furthermore, schools that warn children about the consumption of excessive sweets and soft drinks must be careful not to indirectly counteract their efforts by permitting the sale of such articles for purposes of fund raising. Even the practice of birthday treats in some schools is carried to an extreme that is contrary to health ideals.

Physical education in the schools is undergoing a period of evaluation. Although national interest is focused on the upper and secondary levels, thoughtful persons must assure that the primary school has trained its children to maximum physical fitness before they are sent on.

The Young Scientist

In the past it was believed that man's claim to uniqueness lay in his ability to communicate; today's evidence is pointing in the direction of his thinking ability and the procedures by which he arrives at truths. The poet and artist prompt man to think and the theolo-

gian steers and stabilizes his thoughts, but it is through examination of the processes of his random fumbling thinking that man has developed a pattern by which that thinking can arrive at valid statements. Each of us can think, even though the ability is a relative one, but not everyone thinks in a pattern that produces repeatable conclusions.

This patterned thinking has given rise to the vast amount of scientific products that exist today, and yet it has failed to instill in adults the significance of thinking. All around us we can touch and see the results of applying a thought process, but we teach the young to name and label the *products* rather than steer them functionally in the *thinking process*. Everywhere we read that children can learn about science and in the future gain further control of their environment. Many statements urge the adult to open the scientific door to the young by allowing them to do what comes naturally. Unfortunately, the undirected natural ways of men are often antagonistic to scientific thinking.

The way of scientific thinking is not necessarily found in disciplined areas such as chemistry, physics, botany, or zoology, nor in the research fields of space travel or nuclear energy application, but rather in the habit of organized mental activity. It has been organized thinking by individuals or groups, either entirely original or based on the inheritance from the ages, which has made science a byword in this century. The term *byword* may logically be used since so few people recognize science as anything but a formula to manufacture products and solutions to problems, and one which today often clouds the step-by-step procedure which contributes to progress.

Primary teachers are directed and encouraged to instruct children in the care of pets, the growth of plants, the simple characteristics of machines, the properties of magnets, the seasons, the love of birds, the weather, the discovery of seeds, and the practice of hobbies—all in the name of science! And many chapters in books are devoted to identifying the scientific method and introducing the substance of scientific thinking. Yet these methods are only listed as they apply to areas or products already developed. Therefore, the way of thinking is lost in the handling of the area or the product, and the instruction in the classroom often ends up being more social in nature than scientific.

Much that we do in the primary grades under the name of science is wasted effort not so much because the classroom teacher does not have sufficient background in scientific areas, or because the young cannot think scientifically or do not have the experience needed to make the study profitable as it is for more subtle reasons:

1. Insufficient attention to the methods of science.
2. Inaccurate or multiple definition of terms and tools.
3. Fear on the part of the classroom teacher that her own background experiences do not equip her to teach science.
4. Handling of topics and problems above the experience and intellectual range of primary children.
5. Lack of training in the historical origins and development of scientific things and their end products.
6. Failure to instill in the young that the future is theirs and that many of the problems of today are theirs to solve.

Close scrutiny of these six suggestions of what ails the primary science program may aid in the evaluation of the program and give rise to activities which may have better success.

It will not be difficult to correct ineffective science teaching in the primary grades if we view the methods or patterns of thinking that produce the results we seek as similar to the use and value of numbers in the area of arithmetic. Man's discovery of how to put a quantity tag on things has made those things easier to remember. So by following methods of inquiry can he arrive at facts as valid as his controlled observations. The pattern of thinking that has developed which others can follow depends on these five elements, which do not necessarily occur in a set order although some do depend on a preceding step.

The Scientific Attitude

Each child should realize that events can be understood and their causes can and should be questioned. Reasons, causes, or situations surrounding an event or statement can be analyzed, given, or selected, and will offer evidence for the experimenter to believe or disbelieve. This first characteristic of scientific inquiry is often referred to as *the attitude base*. It is the philosophical origin of science that keeps man still asking and seeking answers to "What is it?" "Why is it?" and "Can it be duplicated?"

Teachers of primary children must stimulate each child to want

to make personal sense out of observed phenomena. The person who believes that fate and fixed prior conditions limit our areas of investigation cannot have this first directional attitude which enables investigation to proceed with clarity. The attitude is akin to our animal curiosity but must be promoted and allowed to grow before it can serve the cause of scientific thinking. It is the obligation of primary teachers to instruct children who demonstrate this scientific mindedness to recognize and apply it and attempt to develop it in those who seemingly do not possess the trait.

A complete unit could successfully be designed which would serve the purpose of directing children's attention to the existence of this attitude within themselves. We should not take this behavior for granted but instead identify it and encourage children to play with the concept. The teacher who turns the questions asked by her alert students to profit is subtly directing the development of the attitude in other children. Studies show that children above the primary-grade level have constantly inquiring minds, and the primary child—as any parent will tell us—may be as questioning. Composing primary-grade pupil-teacher experience charts of the questions that individuals and the class ask is a valuable activity. Directing units or instructional organization toward the goal of identifying the attitudes and questions about a subject is as important, or perhaps more so, than finding pat or selected answers. The first job is to make the child aware that the study of science requires the desire to explore, discover, observe, and question anything and everything and a systematic pattern of thinking.

Definitions in Science Teaching

Even though many texts and teachers do direct the child into the pattern of scientific thinking, the misuse and multiple definitions given to so many tools, words, and procedures of science cause inaccurate results in the thinking pattern. If we try to keep the scientific attitude when we deal with problems to be solved as well as understand and evaluate our resources, apparatus, and materials, a great part of the battle is won. The scientific vocabulary with its multiple meanings is still a stumbling block to accurate thinking if care is not taken to assure that children understand the special use of the terms. Giving special vocabulary lessons or supplementary spelling lessons to acquaint children with scientific terms is not always the best way to obtain the meaning of each term. Accurate

use and constant questioning of the term, material, or procedure *while in use* will establish the knowledge more firmly.

Primary teachers may test themselves on the following list of scientific terms and judge whether they themselves have an accurate understanding of each.

Experiment. The use and meaning of this term is in direct opposition to the manipulation and demonstration that so often occurs under the guise of experimenting. An experiment must have certain factors to be a form of scientific investigation such as (1) a clear definition of the problem under exploration, (2) a knowledge of the variables present at the time of the exploration and observation, and whenever possible (3) a control for comparison.

Problem. Science is the patterned approach to finding solutions or explanations to the queries man has about his world. In scientific use the word *problem* means the statement, matter or belief that is under investigation and experiment. The child's mind is as full of these problems as is the scientist's; however, the problems are not so well organized or identified in the young. A trained scientist may attempt to seek knowledge concerning travel into space. The child may also ask questions about such a problem, but because he is young in the world he will also be concerned with questions like "Why are some people fat and other people skinny?" "Why do we have to drink water?" "How do worms get into apples?" or "What do they mean when they say an ant is strong?" The whys of a child quite often are legitimate problems for scientific inquiry.

Control. An experiment performed so carefully that it will tell you the true happenings or a procedure which is known to render the right explanation is in practice experimental control. In some investigations control may encompass duplication, in others repetition. In studying growth, for instance, duplicating the problem by placing one plant in the sun and the other in a dark closet to determine the need for sunlight is more valuable than using only one plant for observation. Repetition of some activities observed also will lend further evidence for conclusions previously drawn. Whether the word *control* is used in the classroom is a relative point, but the technique of performing controlled experiments is essential for scientific thinking.

Research. The key to the meaning of this word as used in the scientific sense is in its prefix. *Re* attached to the root word *search* demands that a second look be made. This second look can be ac-

complished by checking other statements concerning the problem. Many problems under the study of science have been discussed and written up by other investigators, and children can learn to use these writings for a second look at the problem they are investigating.

Causation. The search for the cause that results in the effect is part of the scientific method. Identifying the cause or causes, is not always as black-and-white a process as the immature or unsophisticated would desire. The belief that there is a cause, root, or base for the unknown is the ingredient necessary for attempting the other essential parts of the scientific method. Mere observation will not necessarily uncover a cause, mere desire to find it will not always aid, but an attitude that assures that guesses can be made, checked, and explored will lead the child close to the discovery of the cause.

Observation. When a scientist uses the word *observation* it is understood that care and accuracy have accompanied the activity. Some form of recording should be part of the act of observing to train children in the reliability of their observation. The search for causation cannot follow chance observation; it must come from cooperative and transferable records of what has been observed.

Generalization. The process of relating certain facts or observations to another group or set of known facts or observations is the application of generalization. To move generalizations from the field of notions into the field of facts and observed causation is the goal of science. If we can strive in our schools for more insight into phenomena and abstraction of the causes of phenomena we shall accomplish generalizations.

Reliability. The person engaged in scientific thinking should be concerned about whether his observations, conclusions, and statements can be said to be constant. The less fluctuation or change in a repeated activity, the more reliably it may be said that the same results will recur. Children should be encouraged to find the exceptions to rules, to be critical of statements, and to be consistent in what they say they saw.

Fact. When people offer and demand facts instead of hearsay, they are producing or asking for repeatable and observable relationships. Science guesses at, explores, and discovers facts, but the product it is ultimately seeking is truth. Truth is the absolute fact toward which many discernible items direct the observer. A scien-

tist can accept only those facts that bear up under research and experimentation.

With only the definitions of these few common words it is possible to note that preciseness is akin to exactness and that exactness may be essential to uncovering facts. The child will be quick to take up the slogan "just the facts" if we encourage him to think in a scientific way. None of the definitions or statements above should give the impression that science is a colorless, precise language or only a step-by-step thinking process. Imagination, guesswork, feeling, and estimation play their part, but they must be under the control of intelligent attitudes which will direct them into usable and fruitful channels.

The Teacher's Preparation

The third reason for limited success in the primary science program is one that is directly under the control of the individual teacher. Many primary teachers fear that they *cannot* instruct in the area of science. This attitude is, of course, detrimental to any part of the curriculum. To overcome such a feeling teachers may find that they can gain confidence by taking only one unit or topic in a given semester. By limiting the areas of problem solving the teacher can gain control of the situation by thoroughly acquainting herself with the problem—by reading everything within her understanding that has been written on the topic or unit. Her next step is to read the material concerning the subject that has been selected for presentation to the young child. After these two reading assignments, the teacher should have sufficient background to allow the children to explore the topic or unit problems with her.

Too often teachers fail to read at *their own level* of achievement and concentrate merely on obtaining material at the child's level. Reversing the procedure, that is, concentrating first on the material at the child's level, is often the cause of loss of confidence since in the actual learning situation the teacher is not prepared to cope with the bombardment of questions from children who want to know more than what either the textbook or the material they are offered provide. The only way the teacher can avoid this loss of self-confidence is to prepare herself first with material at her own level of understanding.

The Capacity of the Pupils

Along with this item of adult fear is the fourth reason for the failure of primary science teaching. Many topics, problems, and units given to classes of primary children are far beyond the experience level of the young mind. There are individual differences in ability, but some concepts are best left to more mature minds. Teachers and specialists should be constantly alert to this major problem of topic and unit placement. The years given to the primary school are too short to waste on teaching material that is inappropriate.

The History of Science

The fifth reason for the failure to make the meaning of science clear to young children is the lack of background material on which to base future work. Problems that are present in the primary child's world are indeed valuable, but equally essential is information about past problems and people who have discovered the facts which in turn have produced the scientific products of the present. Knowledge of the past, when considered in the light of scientific inquiry, helps the young realize that they, too, can do productive work in science.

The Challenge of Science

The sixth and final reason for not reaching the goal in science instruction concerns the school experiences of each child. Those countries which deeply desire each new generation to lead the world in the solution of exciting new problems provide a program that allows for exploration into present accomplishments through play. Children in the pioneer clubs of one foreign country have wind tunnels through which to fly their model airplanes while we in America are still giving medals for starting fires with one match. The teacher, school, or lay adult who relates present problems to the children of today and encourages them to seek new insights or facts will insure better control of tomorrow's world.

Science teaching in the primary grades should not be haphazard, and the subject should not be approached with trepidation. Scientific thinking has become the most fruitful of man's accomplishments. The world, as well as the universe and the rest of space, is so full

of problems that there are more than enough challenges for each new generation for thousands of years to come.

Summary

It is only realistic to accept the view that the great mass of knowledge available in the twentieth century will not be assimilated in a few short years. Not only must the child grasp such knowledge but also the processes by which it was discovered. The primary school, because it is first, has the privilege of introducing the child to numerous important fields in which it can never hope to see fulfillment within the years over which it has jurisdiction.

In some of these areas the primary school wishes only to use foundational treatment. To treat such material foundationally the school must provide those learning experiences that help the child establish mental and verbal recognition of specific content so that he can understand the bases or elements composing the content. However, the primary school cannot expect to establish skill in these areas; indeed, skill treatment—which will appear later in the child's life—implies that the content has become overlearned or fixed. In addition to foundational treatment, which is applied to the bulk of the curriculum content there is a third type of treatment, called impressional, to be found in the primary grades. Impressional treatment develops feeling and awareness of an area, merely preparing the way for foundational and skill treatment later on.

Specific areas in which the primary teacher must apply foundational treatment are language instruction (oral expression, gestures, and written forms), reading (the meaning of the reading process and of the material read), arithmetic (counting, measurements, predictions, and processes), physical education (fitness), and science (the mental processes and tools necessary for approaching problems).

The nature of each of these areas predisposes it to foundational treatment. Each contains so much material and demands so many experiences to establish full understanding that skill accomplishment cannot be anticipated in the primary years. Rushing children into skill treatment results in half-learning and inaccurate assumptions which greatly hamper them in subsequent years. Accepting this fact clears the way for the teacher to approach these areas in a systematic and imaginative manner, and enables her to assure that

understanding accompanies each phase of the learning process. By recognizing that none of these areas can be completely and fully absorbed in a short span of years and that each is characterized by a continuing process in which the foundation is of utmost importance for eventual fulfillment, the teacher is relieved of the pressures which often result in sloppy and ineffectual teaching.

There are, of course, areas in which the primary school is concerned with skill accomplishment and impressional effect. An understanding of these is essential, and a discussion of them follows in Chapters 6 and 7.

Illustrative Unit: *Foundational Treatment of Names*

This topical unit may be introduced to primary children at any age. For the third grade, the teacher may wish to provide greater scope than these lessons suggest, but whatever depth is given to the unit it has important enough content to require foundational handling at each level throughout the primary years. The mobility of students and the multi-grade arrangements within the school offer sufficient change in grade enrollment to warrant inclusion of this thematic unit each year.

The unit should be scheduled for a month or so after school opening in the fall. Enrollments are generally settled by this time, and children have incidental and utilitarian reasons for learning each other's names.

LESSON 1. INTRODUCTION

At roll call, give the original meaning of some of the children's names. For instance, if you have a Peter in the group, call him *rock*; if a Barbara is present, call her *stranger*. Meanings of common first names may be found in some dictionaries or in references like George E. Shonkle's *American Nicknames, Origins and Significance* (Wilson, 1955) and E. C. Smith's *Story of Our Names* (Harper, 1950).

After you have puzzled the children with the change in the roll-call procedure, tell them the origin and significance of the names given. Show them the reference books. Call their attention to the new bulletin board display you have prepared earlier which devotes approximately a third of its space to a list of the pupil's names. Tell them you will leave the reference books near the bulletin board so that they may discover the original meaning of their names. Perhaps they would also like to record these meanings on the bulletin board opposite their names.

For the children in the lower primary grades, the teacher may construct a display which will match the children's name with their nicknames or original meanings.

After class discussion has developed an interest in the meanings and possible purposes of names, show the children a note you desire them

to take home to their parents. Discuss with them the purpose of the communication.

Dear Parents:

Your child's class is beginning a unit on *Names*. The content will include the ability to recognize his complete name, discussion of the auditory and visual likenesses and differences in names, the meaning of names, nicknames, the origin of surnames and family names, and the emotional and aesthetic aspects of names.

Because we want each child to know as much as possible about his name and why he was given it, will you please tell him any stories or family reasons for his name that you can? We would also appreciate your allowing your child to bring a photograph of himself to school for the length of time we will be working on names—we will use it for class practice in recalling classmates' names.

If you will give us the following information concerning your family's names, it will serve as primary source material for the unit study.

Name of child _____
 FIRST MIDDLE LAST

Nickname (if there is one) _____

Meaning of any of the names (if you happen to know it) _____

Was your child named for someone?

Family _____ Friend _____ Hero _____

What are other family names?

Father _____

Mother _____

Brothers _____

Sisters _____

Grandparents _____

Close relatives _____

We hope you will enjoy following the progress of the study of names through your child's reports at home.

Your child's teacher,

LESSON 2. PRETEST

This lesson is to discover the child's ability to recognize his full name, and to determine the auditory likenesses of his first name. A work sheet would be prepared containing all of the children's first names, middle names, and last names printed in boxes, circles, and ovals. The children are instructed to color red the boxes that contain their first names, blue the circles containing their middle names, and orange the ovals containing their last names. The primary goal of this unit is to confirm the child's recognition of his full name. Those who already do this are then asked to learn the names of other children in the class.

A second work sheet may be made up to test the auditory likenesses of names. This sheet has pictures of objects whose word names sound like the children's names. For example, if there is a child named Ann, a picture of a *pan* would appear; a *rat* for Pat, a *bike* for Mike, or a *stick* for Dick. It may be impossible to find word objects that can be pictured for all of the names in the class. The lesson is designed only to make children aware of auditory likenesses. Pupils should be encouraged to find objects or nonsense words that will sound like their names. The teacher may check on the ability of each pupil to find a word that sounds like his name.

Time may also be spent this second day in collecting and discussing some of the information slips returned from home. Discussion should center about interesting stories of "what's in a name."

Some time during the day the teacher may read *My Name Is*— by Lois B. Muehl or *What's My Name?* by Z. Gay.

LESSON 3

During roll call, use the children's middle or last names and practice quick recall of their full names. Those children who have brought snapshots can mount them on heavy tagboard for flash-card drill. You may want to make a group participation activity out of naming the person in the picture by his last name before he can tell his complete name. Any procedure may be used that provides practice in name learning and recall.

You might arrange the snapshots and the full names on the bulletin board and encourage the children to match names and pictures.

Remind children that the following day will be devoted to telling interesting stories behind family names.

LESSON 4

This lesson is provided to give expression to the background of the pupil's names. You should also provide interesting information about your name and stories about other names in your family.

After the discussion has offered sufficient information, the children may be given a work sheet which has a column of the children's first or

last names spelled correctly on one side and on the other side a column containing the same names with the letters jumbled. The children are to find their names spelled both correctly and incorrectly.

LESSON 5

Explain to the children that they will have a quick quiz with the help of the chalkboard or a chart. The answers to the questions will be written on either the board or the chart.

Who has the longest first name in class? (Write the answers given by the children on the board or chart. Discuss them.)

Who in the room has been named for a president of the United States?

Who has the shortest name?

Who has two middle names?

Continue with questions tailored for the particular situation.

LESSON 6

Discuss with the children the meaning of these words which they have heard used in connection with names.

Christian name

Nickname

Surname

Alias

Pseudonym

Foreign name

Pen name

LESSON 7

Read the story *Little Girl With Seven Names*, by Mabel Leigh Hunt. Discuss the feelings people have about names. This story may be read in two installments if necessary.

LESSON 8

Discuss the titles or forms that people use when they do not know someone's name. Put on the chalkboard such words as *Mr.*, *Mrs.*, *Dr.*, *Rev.*, *Master*, *Mistress*, *Bud*, *Lad*, and *Lassie*. Allow the children to add others.

Tell the story of Rumpelstiltskin and point out that names have always been an interesting topic through the years.

LESSON 9

Discuss the names or nicknames the children would like to have if they could name themselves. If time permits allow the children to discuss the names they would give to dolls, pets, or stuffed toys.

LESSON 10

Arrange tag cards printed with the children's first, middle, and last names on the chalk tray or in suitable containers. Have the children respond to their names by finding their complete set of name cards.

Discuss reasons why names should be on personal belongings. Why should each person know his name? What are some of the ways in which the school will use the children's names? The teacher may see which child can recall the names of the most children in the room; or who can recall the greatest number of complete names—first, middle, and last. It is hoped that the children will end the study with a desire to learn and recall other persons' names.

Various games may be introduced for play that will incorporate names. Flash cards, matching games, scrabble, and anagrams are all devices that will lend themselves to the practice of the unit.

A final pleasurable activity connected with this study may be to enjoy the play with name-sounds found in the recorded story, written and told by Carl Sandburg, *3 Nice Mice Brothers*.⁹

⁹ Decca Records 1-241, Children's Series.

Impressional Treatment

Initiating the young child into the world of feeling is both a pleasant and an unpleasant task. The pleasant aspect is that the lion's share of the material is absorbed with one exposure. Yet there remains the undeniable fact that some important concepts require longer exposure than the sensitivity of many adults allows. Parents and the environment prior to school experiences have already enabled the child to sense his way in and out of problems. As he grows he is continually encouraged to use his common sense and express his own feelings about the world.

Children feel around life situations much as the blind men did around the elephant. And this process is never the same for each person. Some children play one situational problem successfully by ear, while others fumble around and never acquire a sense of its meaning. The school that begins the child's education at the age of 4 and continues it through the primary years is interested in the impressions it imparts. Subjects and knowledge to be overlearned at a later date require a certain amount of impressional treatment at this level. Along with systematic content areas, there are many behavioral insights that should receive the impressional emphasis, while other areas of some subjects will demand foundational and skill handling.

The primary school is interested in teaching the child to have *feelings* about literature, music, art, social relations, health, social studies, and speech. Various reasons cause the differential treatment for each of these areas. Social relations problems receive impressional treatment because society's "standard" patterns are indefinite while social studies are given impressional treatment because of the nature of the young child and the complexity of the content.

Impressional treatment can be said to be *initiation*. The child is exposed to the material, experience, or concept, but no major effort is made to define or fix the feeling or verbal explanation of the experience. Stereotyped thoughts and permanent facts have little to contribute in the treatment classified as impressional.

Treating a situation or an organized unit with impressional procedure requires the teacher to differentiate between fixed-concept and open-end material. Some adults believe that if they read the classics of literature to young children they will read better material when they are older. It is like the mother-to-be who listens to operatic music for nine months in order to make her child an operatic prodigy. We cannot reliably measure the end products of impressions acquired early in life, and neither can we assume that some experiences should receive foundational or skill treatment simply because one person or a group feels this content is more valuable than another.

The character of the primary child is the major reason for giving impressional treatment to a great deal of the material covered in the primary grades. It is foolhardy to demand every young child to memorize and retell the story of the "Three Bears," but one can be such a good folk-story reader or teller that the child, impressed with the beauty that is in this simple adventure story, will want to relate his own version of it. The younger the child the more one must teach through feeling. The feeling of being satisfied, the feeling of being the subject of affectionate interest encompasses the child's world, and the feeling that there are some actions which should not be repeated provide him with a rein on life.

It is this feeling about subject areas and life's problems that is important for the primary teacher to understand. Knowing what elements of literature, music, art, behavior, or habits to establish in the young is a major professional responsibility. Teachers themselves, however, must possess more than an impressional knowledge of the area or their pupils will not receive even the desirable "vague" feeling.

Literature

One definite area that primary teachers should acquire a teaching knowledge of is the field of literature. Literature, with its issues of story forms, tastes, styles, levels, selection, and purposes, is often

broken into subdivisions—children's literature and adult literature—for reasons only of simplicity and organization. Literature for children consists of the collected stories and literary forms that are essential to the development of the civilized individual. Because children's literature is captured life, it remains the most valuable content material to use in impressing the child with feelings concerning today, yesterday, and tomorrow.

The impressional treatment given to literature in the curriculum for the preschool and primary child begins at home and is not forgotten at school. Time should be devoted each day to imprinting folk tales, stories to tell, stories to read, recreational and information books, primary source materials, and the world of poetry on the minds of young children.

As the primary teacher looks at the literature which is to be consumed by the child if he is to be affected as she wishes, she will discern forms and problems. Various forms are folk tales, fantasy, fairy tales, and here-and-now stories. Among the problems she must solve are those connected with story reading in groups. Only a careful study of the material available and its possible uses will prepare the adult for an adequate contribution to the child's impressions of literature. Extensive reading is the keystone of the teacher's preparation.

Folk Literature

Impressional treatment of literature begins with folk literature, tales of and from the common people which the ages have distilled. They have endured through generations of audiences, recounted orally and more recently written down, and have become a suitable part of the literary content for impressional consideration.

Well-selected folk literature will impart feelings that lie dormant in the make-up of man. For example, the fable form of the grim tale "The Cat That Married a Mouse" loses its didactic purpose and breathes a hint of values that may be felt by the young—if it is presented with feeling. Some folklore, we must recognize, belongs to a much older age and some only to the scholar who interprets the acts of the past, but the adult primary educator must sample it all in order to give each new generation eyes for the fire of dragons and ears for the whispers of elves.

Some educators of young children condemn the practice of read-

ing or telling of the characteristic creatures invented by past cultures, but to condemn folklore for the young is to hamper the child in his efforts at self-identification. Folklore, the recorded reflections of the past, hold deep magic and meaning for the children of today's materialistic world. The basic human emotions of joy, pity, greed, fear, grief, jealousy, love, power, and humility are entwined in the best of folk literature. Where else and how else can we speak to the child with the tongues of anonymous Pied Pipers? If we raise a baby in a germ-free room, we might discover later that exposure to a normal routine at an earlier age would have caused milder diseases and less troublesome aftereffects. Exposing the young to stories passed on for hundreds of years offers the necessary ingredients for developing the child's curiosity about his world. To be certain, overexposure to folk literature may be as regrettable as underexposure; but neither will be a problem if the teacher studies folk literature and decides which stories obviously will aid the child of today.

Any reader of folk stories discovers that there is no standard version of a tale. There are many acceptable versions of the story of Hansel and Gretel, Cinderella, or the Golden Egg, for instance. By its very nature, folk literature gives each person the right to adapt the story to fit his particular need. The teacher who can effectively tell the story of "The Boy who Cried Wolf" without succumbing to the temptation to preach will indeed impress the child with material that may be transferred to other problems. Sampling the rich store of folk tales leaves the teacher with more material than she can read or tell the primary child; however, some stories are considered basic because in the future the child will recall them for analogy or identification. It is conceivable but not believable that society may want to produce a new generation without knowledge of such basic tales as "The Tortoise and the Hare," "Sleeping Beauty," and "Henny Penny," the legends of great men, and the well-known Bible stories. Some of the most cherished—and most venerable—examples of children's literature are listed in Appendix 2A; these are fifty or so simple reasons for the primary teacher to study folk literature.

In order to impress each generation with the beauty of the past and the lesson value of time-tested stories, the teacher herself must have a thorough knowledge of them. The adult directing the educa-

tion of the young must always be conscious of the place folk literature has in the child's life. If the school limits the impressional use of folklore, it will find itself alone. This generation uses folk characters to sell cars, gelatin, and can openers; fortunes are made in popularizing songs lifted from folk tales, and the motion picture industry gives Academy Awards to people who are not afraid of the "big, bad wolf!"

Storytelling and Story Reading

Primary teachers will soon become aware of the child's own ability to tell and read folk stories to others. As he acquires experiences, his ability to retell folk tales becomes combustible. The discovery of this feeling in the child makes folk literature an area for impressional instruction.

Concerning the teacher's own role, however, there is the problem of the relative values of storytelling and story reading. Storytelling occurred long before story reading, but in our present culture time is not permitted, in view of the many other tasks confronting us, for every primary teacher to learn to be an effective *creator* of stories. Skilled *reading*, on the other hand, is within the reach of every adult. Most folk literature has been recorded in alphabetical and picture writing, thereby making story reading a valuable technique from several standpoints. The writer or editor urged on by the printing press has taken the place of the traditional storyteller, giving the art today as much attention as did the finest court minstrel in medieval times or vocational storyteller of primitive tribes.

Storytelling does provide other aspects that are not found in story reading. The intimate aspects, such as identifying characters with the listeners by substituting a pupil's name or adapting a tale to a given real-life situation, are obvious. Furthermore, there are some types of tales that should be told even by the unskilled storyteller. Personal recollection stories of the it-happened-to-me or when-I-was-your-age variety give the primary child a mental picture of the adult as a child and as an equally human person.

Primary teachers, however, must be cautious not to take liberties in their storytelling, especially if they use the intimate technique such as personal identification and dramatic vocalizing. The frequent suggestion to tell and read original tales as well as folk tales to children can have bad results; rewording *Millions of Cats* or *Ferdi-*

nand, for example, is not only presumption but also a disservice to the dual form of writing exhibited in these and other primary trade stories.

Some storytellers become so effective in their style and unique personal approach to stories that children remember the teller longer and with deeper impression than they do the story told. Storytelling is not meant for mere entertainment or adult wish-fulfillment, but is a delicate method of transmitting feelings, feelings that should grow into beliefs, images, and problems. The story is the thing for storytellers every bit as much as the play is the thing for dedicated actors.

The impression given to the young child through both storytelling and reading stories will provide the positive and pleasurable background on which life interpretations and budding imaginations can thrive.

RECREATIONAL BOOKS

The trade books which make up the bulk of the child's library at home as well as the primary-school library provide the material necessary for the child's recreational reading. The child's acceptance of such books as recreation goes a long way toward explaining their success in extending the horizons of his young world. The new adventures, the strange relationships, the unfamiliar places, people, and plots they present modify as well as enlarge his thinking. It is no wonder that teachers, schools, and libraries need valid tools of selection when one considers not only the effect recreational books may have on the child but also the enormous number of such books that flood the market.

It is common in our preschools and primary grades to find a corner for recreational books, and even in the most barren room a shelf can be found with some inexpensive books for leisure reading. It is only logical to assume that the best imprint is made on the child who is surrounded at home, at school, and in his individual classroom by well-selected recreational books. An environment rich in books breeds a desire to see, hear, and understand the ideas of others. This aspect of content cannot then be left to chance. Teachers must cooperate with librarians to keep a variety of books within the easy reach of children. Each classroom teacher will want to make it plain to the children that they are allowed to keep a recre-

ational book in their desk or locker. A climate that permits a child to take a book out between other assignments and encourages recreational reading in any room, hall, or space where children have time to reflect on printed material will nurture productive minds. The teacher herself impresses the class by having a collection of recreational books on her desk from which she reads for her personal recreation.

BASIC BOOKS

A basic book collection for the primary grades is only the core around which hundreds of other books will be shelved. Any one person or group will develop different basic book lists. The similarity between the lists will be greater than the disagreement if one looks closely, but the more familiar with books the observer is, the more he will notice omissions. A good collection should include books of folk tales and folklore, fiction and historical fiction, animal stories, humor, biography, poetry and verse, and fantasy and imaginative stories—with the addition of a group of intimate books, which may be a new term to some readers. Intimate books are designed especially for the young child, and since they are minute in size they should be read to very small groups; the teacher's techniques should be modified if she uses them for larger groups. Some publishers have attempted to increase the size of these books, with unsuccessful results; they lose the very quality that is engendered by their original size and format. The feeling of the stories is lost. The teachers who used them missed the close rapport they had formerly achieved with their pupils.

A list of suggested basic books may be found in Appendix 2B.

INFORMATION BOOKS

The much-used information book is a literary form with different characteristics from recreational material. Responding to the joint efforts of teachers and librarians, publishers have produced many high-quality factual books for the young child. These information sources are being pushed in the lower grades as foundational material. The teacher who selects such excellent books as *Up Above and Down Below* and *Swamp Life* will discover a staple for impressing the young with the heritage of their culture.

Information books are designed to present factual knowledge;

recreational books are written to excite the reader about judgments and feelings. In making choices among the former, one must act with the boldness of kings and the wisdom of experts. Many teachers fear that selecting information material for the young child is a skill beyond their abilities. When such is the case, the teachers can begin their evaluation by asking whether the book is reliable in its presentation, and whether it gives adequate but not oversimplified information. If the teacher does not have sufficient content knowledge to validate the answers to these questions, she may rely with confidence on the collective selection made by the reviewing committee for the *Children's Catalog*.¹ All teachers will find value in referring to this publication and the procedure used to indicate outstanding books.

In addition to using this basic selective tool, the teacher will gain time by selecting certain information books to be used as standards of comparison in the choice of others. New information acquisitions should parallel the clarity, style, and accuracy that is found in Irma E. Webber's *Up Above and Down Below* or *Traveler's All*, Harriet Huntington's *Let's Go to the Seashore*, V. G. Hillyer's *A Child's History of the World*, Glen Round's *Swamp Life*, Holling C. Holling's *The Book of Cowboys*, Mary and Conrad Buff's *The Big Tree*, Illa Podendorf's *The True Book of Trees*, Herbert Zim's *What's Inside Plants*, and Dorothy Hogner's *Earthworms*. Using books like these as measuring tools tends to reduce the chance of supplying the child with sentimental and inaccurate material.

Good information books for the very young are available and will be produced in abundance when the adults who purchase the selections acquire the skill of measuring quality. Because a book is to be read to a 4-year-old child—or even to a 9-year-old—does not mean that the material must be oversimplified to the point of distortion. Abstract concepts need not be personified or sentimentalized for the young mind to assimilate them. To impress the young child with the beauty of birds or the importance and wonder of weather changes, one does not necessarily limit the material to little Janie impatiently awaiting the first blossom or a snowflake or the personi-

¹ Dorothy Herbert West and Rachel Shor, eds., *Children's Catalog*, Wilson; this publication is now in its tenth edition, 1961, with supplements available for the years 1958–1961.

fication of Mr. Robin! There are many information books on the market that remain true to the material they offer while presenting that material in a way that appeals to the young child.

Information books differ from other forms of trade books. An information book rests on the facts or ideas that are presented in its text, not on any plot or theme of conflict. Its purpose is to give a meaningful and accurate picture of a specific area. The book needs particularly skillful treatment, for young children may not be particularly motivated in the direction of the material or may fail to see the purpose of learning about such faraway projects. It is difficult for the writer and artist to handle actualities while imparting attitudes and emotions—and it takes the touch of the poet to explain to the young the facts found in life without quenching the thirst for more.

The information book of today is not the didactic question-and-answer tome developed in years past. Today's publishers are seeking specially trained experts in every field to present the background on important topics. It is true that when an excellent book appears many imitations soon follow. Good information books are tested by checking the author's credentials and sampling the readability—not an infallible method, to be sure, but a constructive one. Short annotations accompany the list in Appendix 2B to serve as reference points for selection from the multitude of new books appearing.

PRIMARY SOURCE MATERIAL

A type of reading matter that is often neglected in the lower grades is primary source material, that is, an account of an event written at the time and by or about the person involved. Not enough of this literature has received an adequate audience for the formulation of a sound judgment on it, but nonetheless it can make indelible impressions on the child. Primary source material includes personal letters, magazine material, newspapers, stories and letters written by children, diaries, anecdotal records, group experience charts, and recalled experiences.

A first-grade teacher who desires to impress her present class with the value of watching for important and interesting things on a farm visit will achieve her purpose by showing the experience chart made by last year's group. Using old experience charts, children's writings, stories, and letters can give any class a feeling for what

it will do or see and can open areas for exploration. The extended use of newspapers, magazines, and personal letter accounts will give emphasis to curriculum content. Posting the material on bulletin boards for reading and discussion will give the child the excitement of dealing with first-hand material.

An effective use of primary source material was made by one teacher who obtained from all her fellow teachers, the principal, and the custodian lists of the stories which were their favorites when they were in the primary grades. This list coupled with the names and pictures of the contributors was placed on a corridor bulletin board. Interest ran high; the children were deeply impressed by the selection of stories which their elders had enjoyed when they were young.

There is not a content area or curriculum experience that would not be enriched by selective and imaginative use of primary source material. Diaries of early pioneers, great persons, and community people will extend unit handling of topics such as "Community Helpers," "Life as a Pioneer," and "Great Scientists." Newspaper accounts of children's activities, local prize-winning individuals, or family vacation trips will add dimension to family units.

Primary source material has a definite place in the primary school. The 4- to 9-year-old gains in his interpretation of life through selected first-hand material.

Poetry

One of the many mansions that adults desire to open to the young child is poetry. Not unlike Alice in Wonderland who never quite learned how much mushroom to eat to make herself grow, adults are inclined to overdo poetry indoctrination; and seldom does an adult carefully define the various forms of writing that congregate under the noun *poetry*. Poetry is the one basic section of literature that is intended to develop feelings, and its very form predestines it to impressional treatment.

Through neglect, adults often allow their personal tastes in poetry to dominate their judgment. Some feel that because it is almost impossible to define poetry it is permissible to lump ballads, verses, nonsense ditties, jingles, rhymes, and poems all in one pile and call any one of the selections a *poem*. If we would avail ourselves of three study approaches in acquiring a knowledge of poetry

for professional use, we would be pleased with the enlightenment and pleasure we would transmit to the young. Learning the framework of form included in the meaning of the word *poetry* would naturally be a necessary discipline; knowing some of the characteristics that distinguish a verse from a ditty, a jingle from a ballad, and a rhymed story from a poem will help develop discriminating taste. Within this broad classification the reader uses the second study procedure, that of reading widely in each of the forms, in order to learn to differentiate between an excellent example of a given form and a mediocre one. When the teacher has developed discriminatory taste and sensitivity through extensive reading in each form, she will be ready to take the third step of checking her personal likes with the judgment of generations.

With these three approaches we will discover that poetry is an imitation of nature and a record "of the best and happiest moments of the happiest and best minds," as Shelley said in 1840. It is only natural that we should want to pass these records on to children and help them have a pleasant attitude toward all forms of the most perfect expression of man's thoughts. Like the Russian poet Boris Pasternak, we too want to get down with the children and hear the whispers of the grass.

Breaking the collective noun *poetry* into subdivisions, we find that there are many forms that should be given to the child. Poetry includes secular and sacred songs of the past and present, story verse, and measured verse written about events or reflections, nonsense verse which is the child of the ditty, which, in turn, was born of the street cry. The jingle and rhyme seem to have been the prototypes of the ballad and the epic. Acquiring resources and reading knowledge of these types of poetry will direct the adult to the discovery that a *poem* is the most refined form of them all. A poem may not be defined in measured beats or lengths of line but is felt by knowing the emotion one imparts when reading such selections as William Blake's *Infant Joy* to young children.

Instruction in Music

A child's world without music is a world without the sensations of repeatable pleasures, and the limited and simple musical impressions of the past are not really sufficient to reveal to the child the

beauty and discipline of discovering what is in music. The primary instructor who attempts to furnish her pupils with a variety of high-quality musical forms and experiences contributes greatly to the world we want today's children to know. Musical instruction begins with the spontaneous use of songs and progresses to the subtle interpretations expressed in dance, instrumental exploration, form identification, and music listening. To accomplish these impressions for consumption by our young, each primary teacher will have to face the mirror on the wall and ask the question, "What do I know and sense in my own musical life?" If the answer is musically insensitive reflection, the portrait will need retouching.

The varied songs that the American child sings should begin at home and be learned in infancy. Unfortunately, this early musical training is not found in all homes, and the young from those families enter primary school deprived of a musical background. Some children sing at the drop of a coloring crayon. It is with this initial spontaneous display of music that the musical program at school should identify itself.

Fortunately, one can usually step into the 4-year-old playroom and hear the children humming along with their activities. One can visit a kindergarten at holiday time and hear the children singing the German version of "Tanenbaum" or another familiar carol, or find a popular ballad being sung by choice in a third grade. The musical offerings in our 4- to 9-year classrooms run from permissive individual singing to the use of recorded classical music as instructional material.

However, as room teachers consider the material that is to be treated by impressional methods, it would be advisable to keep some basic values in mind. Any treatment of the music content should have as a major goal to sensitize each child to the range of sensations, emotions, and intellectual factors contained in musical forms. If the adult loses sight of these collective quality values, the musical curriculum can easily deteriorate into auditory bedlam. The primary teacher has to encourage children to discipline themselves to the acceptance of skill treatment at a later age when such handling will be of maximum benefit.

Many teachers will find themselves in schools where special music instructors have an excellent foundational program in operation. However, this program seldom extends to the 4-, 5-, and 6-year-olds,

so that the selection of musical experiences for those children is under the control of the classroom teachers. The ideal would be to train all primary teachers to approach the music curriculum with confidence and pleasure. Yet many teacher training programs require courses that are designed to make the teacher *competent* in this area rather than *confident*, and these attainments are not the same. A great number of kindergarten teachers are competent enough to play the piano for a patterned program but lack the confidence necessary to enrich a monotone's life or extend a class's appreciation beyond "The Nutcracker Suite." Programs stressing the future teacher's confidence level over run-of-the-mill competence in performance would add immeasurably to the music curriculum. The adult must treat music with a high degree of appreciation, and encourage children to feel the emotions that surge through songs and instrumental works. The child must learn to feel music in his skin and bones and to think music in his mind.

Singing by Rote

Singing has long been the adhesive ingredient used by recreation leaders to unify a group, and it should have the same effect on primary children. Though the child will not identify these ends, singing a song learned by rote will accomplish unification, self-expression, release of sound, and appreciation of the human oral mechanism. Learning songs that mother knows or bringing home new songs to sing to the family will provide the self-identifying act that forms personality. At one time children were sometimes expected to recite or sing a drilled repertory to visitors, but this custom has been replaced by the spontaneous use of song to express feeling and demonstrate pleasure.

The role the teacher creates for music from the impressional treatment makes singing an integral part of the classroom and extends it to home activities. It not only allows but encourages singing during dressing time, recess play, and in-between parts of the schedule. Learning and enjoying a variety of good songs promotes further musical experience, and the primary teacher who herself takes pleasure in the music she is teaching sets an example that will leave an impression never to be erased.

Once a teacher has gained the confidence necessary to bring quality music into the classroom, she will find herself developing a

varied and personal approach to teaching songs. However, a few important steps may be suggested for the novice.

1. Know the song thoroughly.
2. Sing the song in its entirety for demonstration.
3. Ask the children to join you in the second rendition.
4. Notice if the greater part of the group is attempting to sing along on the second singing.
5. If children demonstrate interest, teach phrase-by-phrase analysis.
6. Sing the song once more completely through—this time with feeling.

Not only should the *feeling* factor of music result from rote singing, but the young child should be encouraged to discover the repetitive phrases, recurring themes, and patterns of sound that are the musical components.

Rote singing may be taught to 4- and 5-year-olds during liberty play periods by informal gatherings around the piano or record player. The informal atmosphere that accompanies music must not be overlooked. The upper primary grades may be introduced to round or part singing with the same rote procedure. Third-grade children may be given extended singing periods treated from a foundational angle.

Folk Music, Ballads, and Popular Songs

Americans are becoming aware of the folk songs that lie at the root of musical development. It is said that Mark Twain invited America to become nationally conscious of her wealth of Negro folk songs. If we can judge from the amount of folk music available on long-playing records today, we may say that his advice has been taken to the point that America is saturated with this simple but understandable form of musical expression. No doubt there are many that have not outlived their purpose, though probably some so-called folk songs are better left to die on the lips of the first singer! By his very nature, man absorbs the unadorned and surface manifestations of human emotions, and thus the young child can digest the folk song, like folk literature, easily.

However, unless the song list is edited carefully, this musical form can permeate the curriculum and drown out other musical experiences. This is to be avoided by the classroom teacher as well as by

the specialist, who sometimes selects music for its acceptance rather than its impressional value. Primary teachers must attune their ears and intellect to folk and similar musical offerings and subtly substitute a higher-quality song such as "Pat-a-Pan" when the 5- to 9-year-olds suggest for the hundredth time another singing of "Jimmy Crack Corn." The great asset of having a trained adult come into our primary classroom if only for a period is to give that range of content that few homes provide or have time to develop but still want their children to experience.

For all their profusion, the songs the teacher might offer her pupils can be divided into manageable groups, each with its particular purpose and pleasure.

Tongue-in-cheek songs. There might be less need for biting of the tongue in personal relationships later on if children could learn the philosophy of the tongue-in-cheek song at an early age. Humor in any form has a positive effect on people, and when we encourage children to derive pleasure from a bit of leg pulling or Irish blarney we may not have to throw the baby out with the bath water. In educating the child to become civilized, a dash of jest should be added to give the finishing touch. Sprinkle humorous songs lightly but regularly.

Game and action songs. Give the young child a bit of action or movement with a song and the teacher may become a soloist—but oh, what pleasure results! Teaching the song before teaching the action will bring about better musical participation, but don't spoil the game because the child is carried away with the force of movement.

"Fill-in" songs. If we made a study of the amount of time that is spent between activities or events, we would be surprised at how much learning time is lost while children are dressing to go outdoors, waiting for a bus, waiting for their turn to do something, or involved in any of their "odds-and-ends" activities. These periods are too short for accomplishment of a skill, but they are long enough to teach them songs that offer the feeling of human dignity and togetherness.

Lullabies. Children do not hear enough lullabies during the school day. The teacher who uses quiet songs and lullabies for their tranquilizing effect is wise. This musical form was developed for its comforting qualities, and children need a break every day that

does just that. The teacher who uses lullabies will find out how problems can melt when these quiet tunes are sung spontaneously.

Songs for special events. The sentimental side of adults has overemphasized the place and number of special events songs. Some special events such as Christmas are surrounded with an unlimited supply of worthwhile commemorative music, but not so Halloween, Valentine's Day, Mother's Day, Thanksgiving, or national leaders' birthdays. Unless a song or musical selection is going to have an indelible impression on children, we do not need to bend a holiday to suit a song or jingle a tune to fit an annual holiday.

Rounds. There is nothing like a simple singable round to make young children catch the "Bernstein-ness" of music. Rounds like "Scotland's Burning" have been tested by time and a host of children around the world. First experiences with rounds should have actual physical divisions between the groups so that the young child can sing from his clearly defined group.

National songs. The occasion will also arise when children need to know the songs that take note of their own country's or other countries' pride or accomplishments. It is regrettable that many more catchy and learnable songs are not available.

Old favorites. These are the songs that children will learn in their youth and carry into their adulthood, as their parents and teachers have done before them.

The beginning teacher would find use for a good selection of songs which have been chosen for quality and variety and which will develop musical taste. The list of songs in Appendix 3A present a good range for the primary child, and the books and recordings included in Appendix 3B may serve as a skeletal library upon which to collect more material suitable for the young child.

Rhythm

While the children are being given songs to grow on, the greater musical world may be explored by providing some inexpensive instruments for both liberty and organized musical play. Effective use has been made of drums, rhythm sticks, bells, and autoharps. Teachers who use them find them helpful in stimulating the body responses that become associated with music listening, although some musical activities with these simple rhythmic instruments have encouraged patterned responses which have not yielded the

desired results. The time, money, and effort we now spend trying to induce the very young child to tap, clap, and bounce to a given beat seems fruitless. Investigations have uncovered factors suggesting that the primary teacher will better serve the child's musical future if she confines her efforts to *impressing* him with rhythm. An overly ambitious approach could make the rhythmic part of the musical offerings as useless as the proverbial sixth thumb. The knowledge of rhythm that an impressional treatment imparts fits the natural movements of walking, skipping, clapping, hand swinging, and other overt body action to a musical pattern. Considering some of these factors may aid the classroom teacher in augmenting the work of the special teacher. It is wise to remember that:

1. Each child has his own unique rhythmic performance. It may not seem to fit our adult concept of *one, two, three, one, two, three*, but who can say the beat of the rock 'n' roller does either?
2. Keeping time, skipping, and other rhythmic performances have little or no relationship to other motor tests.
3. Walking rhythmically is the body response that has transfer value to motor agility.
4. Age and ability to keep time to a given pattern have a high relationship, so that the upper-primary-grade child might be expected to differentiate and reproduce rhythmic patterns better than the 5- or 6-year-old.
5. Young children can reproduce a pattern of sounds after hearing or experiencing it as a complete message. Keeping time to the music as it is being played should start from a spontaneous base and be developed through simple analysis.

Given the opportunity, children will develop a self-imposed rhythmic movement that may be used to illustrate the formal rhythmic pattern of disciplined music.

The day of the organized rhythm band has probably passed with Froebel's primary yarn gifts, but the impressional emphasis that should be placed on seeing, feeling, and getting into the beat of the music is still important in the primary grades. The gradual recognition and comparison of rhythms may be more important at this age than mere identification of marches, waltzes, and fox trots. Is the music fast? Is it slow? Where and how does it repeat? These and other questions may be suggested to a group to initiate interest in

rhythm as one plays sample records or piano selections. Transferring human speech to the stress pattern within certain structural phrases as is done in the delightful record "Little Indian Drum" (Young People's Records, Inc.) may be a great help in making a class or a particular child aware of rhythm.

Musical Expression

Singing and rhythmic movement are but two of the many overt responses that the primary child should have to music. Fostering an atmosphere that permits musical expression is a very important phase of the musical curriculum. Children should feel free to express themselves on simple instruments, imitate the sounds about them, match tones, and make up ditties or verses that please their ears. All the primary grades should have a musical corner where during liberty play period the child may finger out a tune, spin a record, beat a drum, or, if he's fortunate, entice his playmates to join in a combo rendition.

Why should the 4- and 5-year-olds have a permanent piano and not the first, second, and third graders? If for reasons of economy a piano cannot be purchased for each primary room, old models of pianos may be mounted on wheels to provide a movable, jointly owned instrument. Whatever the solution, having a basic musical instrument readily available is sound. Children will express themselves in a musical way when equipment has been supplied along with permission and time.

Joining in with the child when he is humming will put a mark of approval on the act and prepare the child for attempting to match tones. Preschool research has demonstrated the value of systematic, informal, and instructive lessons on tone matching and musical discrimination; we should transfer the pattern to the older primary groups. To deny primary children the right to express themselves with music is to limit the civilizing action that these cultural achievements offer.

Dance

Singing, imitating sounds, and plucking, pounding, or twanging simple instruments are among the ways a child reacts to music, and most schools incorporate these activities into a planned musical program. Another overt reaction, the dance, has not been so

thoroughly accepted in our primary grades as it perhaps should be. So few teachers have received the training necessary to release the muscular movements that express feeling in the way they could do naturally as children. Oh, yes, we impress the child—we even attempt to fix in him the orderly steps that have been tagged as the waltz, square dance, minuet, polka, and Irish jig, and since the Sputnik we've even encouraged the Russian cossack dance. But in spite of all this experience we still do not build on the child's early inclination to *feel* the world about him with his muscles in movement as well as with his other senses.

If we could release the energy in the muscle cells and allow physical expression—such as is found in modern dance with its formula-free core—to spring from both child and teacher, we would discover an entirely new world. It takes a bold teacher to interpret music and words with muscular action, but if she has that courage she can set the imitative figure for children to follow. Simply allowing children to express music with their bodies or imagine what their bodies would do in interpreting a melody or orchestration is not enough. Teachers must understand and practice modern dance themselves or they will be like the mother who allows her child to go to the water hole but not near the water.

Modern dance enthusiasts describe the virtues and value of their program vociferously; they maintain that children normally desire to react as they prescribe and if given the free environment will exult in muscular ripples. This may be true, but the home and our traditional culture exert such confining limits on activity of this kind that it is difficult to prove. It is left then for the school to nurture modern dance through adults who dance in a way that is less restricted than the stilted forms now found in our classes. However, breaking down the barrier that teachers, principals, and other adults who work with the young have against bodily expression within a group is the main stumbling block to a productive dance program with young children. The principal or teacher who can, when the mood and occasion arise, catch up a child and dance around the room or playground with him impresses the group with the truth that emotion can have an outward release in movement.

When will we progress in our professional thinking to the point where subdued and restrained adult reaction to situations is not necessarily the *only* behavior considered proper for exposure to the

young? If adults could willingly and ungrudgingly allow the young to dance for joy, clap for pleasure, and roll in delight, they might not witness so much of the rock 'n' roll—or its future counterparts—that disturbs them.

Balance of Musical Material

The pattern that each adult uses to impress the young child with musical material will undergo the same modifying action that other content material receives. The teacher must realize when, how, and where she stops following a suggested pattern for presenting and developing the musical field, and should make a mental note of her modification for later reflection. The teacher should be certain that a balanced program is being imprinted on the class and individual, and if she is not watchful of the changes she introduces, the musical impression could become so lopsided that a whole group of children would be nurtured on nothing but, for instance, popular ballads.

A balanced program that is presented in a spirit of positive appreciation may be established if we first consider the following ideas.

1. An adult's or teacher's task in giving a child musical impressions is to lead him into the mental and sensory experiences of music. This eliminates the concept that a teacher must instruct a child to like music, a personal reaction that cannot be accurately measured or maintained. The teacher would better spend her energy in presenting musical potentials.

2. The child should be shown how to find the less apparent musical sensations and experiences as well as the obvious musical bases, which can be compared to that productive and important difference between high fidelity and the old hand-crank phonograph. Both machines reproduced recorded music, but the trained ear in this day and age would only tolerate the hand-crank machine for its historical value.

3. The child should be exposed to every available form of musical literature. If he is introduced to a great variety of music in his primary years, it may eliminate or negate the unjustified prejudices that seem to keep many adults, privately or in their social group, from even trying to enjoy certain forms of musical expression. Primary children, of course, will not be able to appreciate all of

the musical literature in complete or mature production, but samples should be imprinted on their ears.

A balanced musical curriculum for the primary child will be achieved only when a specific body of musical experiences and literature is made available to the child. Competence on the piano is not enough, the primary teacher needs to acquire the critical judgment to select and present a range of musical experiences to the young. Beginning primary teachers may follow the guidelines below in formulating an appropriate program.

1. Provide time and opportunity for spontaneous informal musical experiences.
2. Provide planned and interrelated musical experiences—playing a musical selection written centuries ago, for instance, will impress young children with the legacy of the past.
3. Present a variety of musical literature of high quality.
4. In order to establish a base for reference and verbal comparison, refer to and identify musical structures, forms, and patterns: tone (pitch, intensity, timbre), rhythm (duration, pausing, articulation, phrasing), style (ballad, song, suites, symphony).
5. Insure that children's listening attitude at all levels is music-centered and response-minded rather than story-centered and verbally founded.

The musical list in Appendix 3C may be used as the basis of a collection which should keep quality, form, and sensation uppermost in the child's musical life; the musical sensitivities of a large segment of our society are directly related to exposure to music and the quality of that music in the schools. America is becoming more and more musically conscious, and primary schools that provide a variety of musical experiences will help foster that trend. Particularly, because today's musical equipment is doing a better job than yesterday's hand-crank machines, the school owes it to its pupils to equal such engineering skill with quality of content in its program.

Piano Versus Recordings

In surveying the practices in our primary grades, one notices that a common feature in most preschool and kindergarten classes is the teacher's competence in playing the piano. Some training institutions

include this skill in their graduation requirements, while others eliminate it altogether. The question of whether the ability to play the piano is important has become emotionally laden in some normal schools; in others, it is considered rhetorical.

We may gain some knowledge about the value of piano competency if we evaluate what the teacher is using this skill for in the classroom. As in all situations, there is a range of practice, but close scrutiny will show that the great middle group of teachers use the piano in these patterns:

1. To establish conditioned behavior in the group. Certain chords, when played, signal the children to stop work and clean the room or to drop everything and come to the piano because the teacher has something to tell them.
2. To teach rote songs.
3. To provide melodic and rhythmic background for group activities for purposes of relaxing, spending energy, and interpreting ideas. Quite often if the teacher herself is a highly skilled pianist, the children spend too much time listening and are not encouraged to explore the instrument themselves.

If these three practices comprise the core of activity involving the instrument, we may question its place in the primary grades—especially if the first and third patterns are followed daily. It may seem a good idea to accustom young children to musical chords or a jingling piano phrase, but we would do better to leave such low-level conditioning to fire alarms, air raid sirens, and extreme emergencies which do not confuse a satisfying and cultural experience with a matter-of-fact request or command for physical obedience.

If we could instruct the primary teacher to play the piano with *confidence* and use it *properly*, this instruction would unquestionably hold a dominant place in the training of future teachers. If the teacher brings years of piano instruction to her special primary training, she has something individual and valuable to give pupils. But if she is required to acquire competency on the instrument during her college years, she may not develop a form that is worth setting before a class daily.

A solution to the question may appear if we examine the backgrounds of students training to become teachers. Suppose we require those who have not had several years of piano instruction to

bring to the classroom an investment equal to the average early training of students who play the piano completely. This investment might be instruction by records, tapes, or other types of musical reproduction which would provide the musical impressions desired for young children. This substitute training would in no way compensate for a good personal critical faculty, but would allow some students to concentrate training in areas which would equip them with a richer background, and in addition would help correct the existing practice of accepting a low level of performance in fulfillment of the music requirement.

The problem of piano competency is one of quality; when the teacher cannot produce quality music on the piano we may be doing our children a service by *not* encouraging her to pick out a tune. Because primary children are inexperienced and cannot readily differentiate between the good, the mediocre, and the poor is reason enough for us to consider carefully the quality of musical performance they are given.

Instruction in Art

The area of art has many different facets; sometimes we confuse the *artistic* aspect of the concept with operational acts. The operational acts necessary in primary education are covered in the chapter on skill treatment. Here we will examine the impressional treatment which should be given other parts of the art content that are too frequently overlooked.

Teaching art consists of more than allowing children to be creative or to release expression in imaginative play with boxes, finger paint, sketch boards, and clay. Art as a concept is first and foremost an awareness which a person gains of the world. This awareness has its roots in sensitivity to the beauty of nature and man.

Given this definition of art, how then can we impress children with natural and man-made beauty? Even if we could fully catalogue what people think of when we use the word *art*, is it possible to instruct the young in its attributes? Simply asking these questions honestly and analyzing the concept of art brings us closer to the problem and, perhaps, closer to transmitting an impression to the child.

The aesthetic sense takes a long time to develop, but the roots lie in the experiences of the child who hears adults talk about the beauty of nature and objects. This verbalization is essential to awareness, though it can be overdone, for it gives the child words with which to express the feelings that can erupt from the soul. The very young child may become aware of the world by simple, informal lessons that draw attention to random patterns of clouds in the sky, progressive ripples in a pan of water, or singular notes of certain birds. These experiences, however, are difficult to give to a group of children because of the intimacy necessary between individuals before personal interplay is possible.

Artistic impressions must not be imposed upon the young child from without; the best method is to become aware as an adult of what you as a unique person feel and know about the forms around you. If the adult assumes the responsibility of discovering his own particular likes, the evaluation process may take place. This personal awareness will find a way to communicate itself. The adult must guard against impressing *only* his own perceptions on the child, although this does not mean that he should take note only of the obvious art in the environment. The adult awareness must be a disciplined and organized frame in which to arrange the artistic aspects of the environment. This organized frame will contain functional knowledge and the ability to apply the elements found in art.

The Elements of Art

The distinct elements of art may be called (1) form, (2) color, (3) texture, (4) value, and (5) design. Many readable books have been written on these subjects, and the primary teacher will benefit from any instruction she obtains from reading in this area.

Self-appraisal is the keystone to impressional instruction and should change the approach commonly used. The teacher should ask herself, for instance, "Why do I have this vase in the classroom?" Her question will lead her to wonder: "Did I select it in the belief that children like animal shapes, or because I like it, or because it has an artistic value?" and she will be on the way to an honest artistic self-appraisal. The manner in which the teacher answers these questions will give a clue to the pattern she unconsciously follows in the art curriculum.

As the teacher takes stock of her own knowledge and feelings about art, she is preparing herself for the job of providing the atmosphere that produces art experiences.

The Pattern for Art Instruction

If it were possible to set up a pattern of organized experiences that people feel would impress the young with the concept of art, an orderly pattern such as the following might well emerge. The heading *spiral recurring step* is used in these suggested items to emphasize the idea that children do not develop or learn by levels or easy-to-more-difficult steps, as we said earlier in this book; they learn more in the manner of a spring that spirals upward toward a higher level and yet retains the flexibility needed to recoil, to re-experience the ideas learned earlier. Dr. Arnold Gesell refers to this spiral organization as a reciprocal interweaving, and states: "It must be remembered that the mind does not grow on a straight and even front. The course of development is uneven (in some children more so than others). It zigzags, and sometimes it spirals backward in a way which suggests retreat and regression."² The reversion, or springing back, is to be respected for its value in learning, and is a factor the teacher will do well to hold in mind as she plans art activities for her pupils.

Spiral recurring step 1. Spontaneous informal experiences which point out the forms, color, texture, design, and value in nature and man-made objects constitute this first step. This type of experience is basic to any participation in art media and actually is a never-ending process which spirals upward with deeper and richer analysis of both random and planned situations.

Spiral recurring step 2. For the very young, the first art experiences may be directed toward sand forms, color sand painting, clay and mud manipulation, rock and stone mosaic, scribbling, and pasting. As the child acquires experiences in these natural and semi-natural media, the adult will notice his absorption with his personal exploration of tempera painting, crayons, chalk, colored pencils, water colors, various types of clay, pasting, printing, and sculpturing.

Spiral recurring step 3. As the child explores the many practical and inexpensive art media, one type such as water-color painting is

² Arnold Gesell, M.D., and Frances L. Ilg, M.D., *The Child from Five to Ten*, Harper, 1946, p. 26.

given specialized treatment. The teacher selects one medium or encourages each child to explore a form he selects himself in greater depth. This step implies concentrated effort and practice play.

In thinking of these steps the reader must keep in mind the words *spiral recurring* so that the process will not be viewed as fixed levels of participation but rather as a development with sufficient elasticity to allow each level to exist while another is being activated. If we can provide a good range of means of expression, the early art activities may be more beneficial in making children aware of the existence of the discipline of form in civilized life. Sand drawing or dirt writing may help the child learn to produce shapes, lines, and forms that are, if not exactly realistic, at least more closely related to the adult concept. And giving the young freedom to scribble their way to symbolic and identifiable forms is a solid base for meaningful learning.

As much as we would like all children to express an individual and original feeling in their own style, there are some, or even many, who never get off the ground for lack of the confidence and inspiration. Allowing and encouraging children to scribble, design, or draw from actual models is as valuable an experience for the young as for the specialist. It is a common error among adults that "creativity"—that overworked and misunderstood word—is inspired and nurtured by the presence of a few artistic supplies, a mere suggestion of an idea, and a block of time, with no formal introduction to their merits or use. This may well be how those of superior environment, imagination, and ability are molded into fine artists, but it is not the way to encourage those who are less fortunate to even attempt such heights. This process and its results are better realized in mud play, sand play, water play, or block play. If a cue can be given to a child who needs the satisfaction that can be had from artistic endeavor, it is the privilege of the primary school to give it to him. This cue may take the form of permissiveness, as we said above, or of objects, models, or any available subjects. Freedom and originality coupled with a teacher's encouraging attitude will foster a desire to explore more independently.

Quite often the primary teacher will notice children following or copying the patterns or pictures of their classmates. This practice is not morally or aesthetically wrong, nor should it be condemned; it is rather a warning to us that our environment, motivation, and inspiration are inferior. It is far better for us to recognize the unconscious

desire for success and fear of failure that are the cause and to attack the situation positively by remedying the fault that is ours.

Art Materials and Media

Today the tendency for teachers to use every available material for art expression has given rise to a craft application for all types of substances. The basic art materials, of which other products are modifications, are clay, sand, dirt, marking instruments, paints, wood, stones, and paper. The expressions which result from their use distinguish them from the materials of the crafts.

In assuming that we must provide all types of material, we may prevent the young child from developing a feeling for a particular medium. Froebel selected his original gifts from the natural and immediate environment, and it was not until pedagogues polished and commercialized them that they took on their present expensive state. The 4- and 5-year-old should be encouraged to construct and mold from raw material such as playground sand, rocks, dirt, native clay, and mud.

As the child moves up the grades the formal use of raw materials and explanations of why some materials are refined would not be amiss. The more reason and discussion we can develop in our art forms and materials, the more civilizing value they will have for the growing child. Suitable concrete items for the older child's impressional involvement include the many forms of refined as well as raw materials—paint, chalk, crayons, clay, paste, glue, wood, paper, cardboard, slate, stones, sand, wax, metal, plaster, papier mâché, and ink.

It should be remembered that learning to use materials does not of itself constitute an art experience. Furthermore, the directed or informal and self-selected activities of a child must give him an awareness of the elements of art. Simply providing art activities without the light of comparing or relating can leave the child with concepts not unlike the viewpoints of the giant who believed he heard the voice of God when actually he heard his own words echoing in the canyon.

Social Relations

In Chapter 2 there is a discussion of the socialization pattern for curriculum design, the core of which is the area of social relations. All the young child's everyday relationships, including those at

school, will involve social relations. The problem is to establish the boundaries adults desire to impress on young children. Some believe that these boundaries must be narrow and rigid, others hold to none, while still others maintain elastic fences.

The educational task of the primary school is greater than merely maintaining a field in which social relations exist and in which individual behavior is the sole concern for instruction. The natural behavior of the child is not antisocial or characterized by troublesome traits. If one follows the insight of Rousseau, the child is only spoiled by society and those who shape his environment. The four or five years the child has been under home direction have contributed as many acceptable behavior traits as they have unacceptable ones. Not until a child or a group of children exhibits behavior that has a negative quality should a school direct the curriculum toward conduct. The teacher's understanding of how a child grows socially as well as mentally and physically is fundamental to the treatment social relations should receive in the primary grades.

The Teacher's View

The problem confronting the primary teacher today is not simply recognizing the existence or importance of social relations but rather how to interpret the behavior within these social situations. The teacher has acquired through her reading and training some information concerning the shy, timid, aggressive, dominant, meek, and reticent child, but reliable interpretation would demand years of specialized psychiatric training that the primary teacher is not prepared to undergo.

Sociometrics and sociograms may temporarily pinpoint the isolate or a cluster, but these may also consume the time which could be used in establishing meaningful social relationships. Such measures are useful as study tools in research centers, but may in the classroom prove wasteful or even occasionally improper. When the use of sociometrics in the public classroom requires immature children to answer questions such as, "What two or three children in the room would you like to invite to a party?" or "Who is your best friend?" then it is treading on doubtful ground, and parents have every right to question this invasion of the child's privacy by persons not trained as psychologists. As well, some sociometric questions are nothing more than popularity contests and do not belong either in a classroom or a serious investigation.

It is a fundamental fact that social relations are not firmly fixed in the primary years and that a "heap of living" will take place through the elementary and adolescent years which will direct and fix some personality traits. Children's behavior is dependent on innate organic factors, social fields for stimulus and response, and the interaction of time, persons, places, and things.

All learning involves growth; growth involves change; and the child's personality at 4 may not or even should not be the personality at 8 or 9. Not only is there a shift in personality patterns within a child; there are changes involving status and acceptance within groups. When we have reliable tools to identify the concealed or imperfect personality traits within the child, we may increase the efficiency of our training program for teachers. Until that time we should continue to seek constantly to identify and recognize the unique features of the individual. When a trait emerges that will be an asset to the individual in our present culture, we should nurture it with action and love. When a liability or defect makes its presence known, we should give the child understanding and guidance to help him eradicate it. Above all, we must not form any judgment on a personality trait without asking ourselves why it is considered worthy or unworthy and how we as adults acquired our attitude toward it.

Behavior Characteristics

The teacher of the young child all too often has descriptive terms given her for the evaluation of behavior. *Dominant*, *frustrated*, *regressive*, and *integrated* are merely adjectives that serve to describe behavior. We may need to direct more attention to the terms defining behavior that can be communicated to parents and lay persons. Professionals can use such terms as *self-dependence*, *energy output*, *social responsiveness*, *adaptability*, *smiling facility*, *crying facility*, and *emotional balance* in evaluating individual characteristics, but the parents or the child will better understand the emotional reactions implied by *humor*, *laughter*, and *smiling*.

As the child grows with the passage of time and the accumulation of experiences, these behavior traits, assets and liabilities alike, become fixed. It should be the job of the primary teacher to present the patterns that the general culture has identified or approved. In the nomenclature for these patterns, some that deserve attention are persistency, sense of humor, tattling, sharing, sense of sympathy,

sense of achievement, honor, fear reaction, destructive action, failure, rationalization, and indifference.

Adults may feel that the understanding of such traits is beyond the ability of the primary child, and this is indeed so; but the planned and informal activities the child engages in can well give him concrete experiences with which to develop gradually the concept of the behavior pattern. We can impress the young child with the need for many of these patterns by encouraging their future development.

Personality Development

Inference from recorded studies offers some generalizations that may be used in our primary schools. These generalizations have been gained from laboratory or controlled study and ordinarily check common observations that have been made throughout the years.

The younger the child, the more simple, supervised, and limited is the amount of time spent in single activities and larger groups. This does not mean, however, that a 4- or 5-year-old can maintain interest for only 10 or 15 minutes in a given activity; any parent can verify that many very young children will stay glued to a television set through long programs. The length of time spent on an activity is as directly related to interest as to age, and the young child often has a high interest capacity.

Direction for activities and group games should be clear and sequential. This is true of all directions. The child will understand and participate at every age level if directions are restricted to essential points and presented in a minimum of words. We can become so fearful of the possibility of a traumatic physical or emotional experience that we hover over the child. Overdirection and oversupervision can have a negative effect and can cause outward or inward rebellion.

Insufficient learning materials (play equipment) may cause unnecessary behavior problems. One wagon in a kindergarten can be a source of conflict as can one basketball or jump rope in the third grade. When an activity is one that all children should pursue, the material involved must be duplicated or triplicated. In many respects the room that has more items of the same piece of equipment is better furnished than the room that has only one each of a great many articles.

Whenever a young child finds himself in a group of his peers he

is as it were facing a mirror and realizing his own personality. When a child plays with other children, his self-knowledge increases as he says, "I can do that," "That's what I do," "Can you do this?" and "Let's do this together." Nothing satisfies the ego so much as discovering that another person is just like you—and this happens automatically in group relationships. The insights, changes, or borrowings that come from group interaction are dependent on mentality, interest, and awareness of these interaction possibilities.

The one trait that is an index to the emerging personality in the 4- to 9-year-old is vocabulary development. Most studies indicate that by the age of 4½ years the child is a highly social individual, using language for every desire and want, physical and intellectual as well as emotional. What the child asks, how he asks it, whom he talks to, the number and variety of situations in which he talks or seeks communication—all these are components of behavior in which the teacher may discover the child's personality. Investigations have demonstrated the need for teachers to encourage and aid the young child in developing ideas, concepts, and vocabulary. Any direct or indirect instruction that is given to the primary child will be reflected in his speech, so that this instruction should be as meaningful and accurate as possible.

Techniques for Training

Various techniques may be used to impress children with the standards for acceptable and unacceptable social behavior. Indirect methods, the experience approach, and projective analysis have been used for a number of years with varying degrees of success. No primary teacher should be disheartened when acceptable behavior traits are not understood or acquired after a few lessons, for often more success than is seen by the parent and teacher will manifest itself in follow-up social situations, sometimes far in the future.

An indirect method that has constantly been endorsed without assured success is bibliotherapy. Since the origin of storytelling, there have been tales especially designed to direct behavior. Folklore abounds with the rewards given to those who love their neighbors, care for the ugly, and have patience with animals. Sufficient numbers of stories have been handed down through generations to give children glimpses into what happens to those who indulge in unacceptable behavior.

The present golden period of children's literature has produced beautiful stories that serve as indirect behavior guides. Mabel Leigh Hunt's *Little Girl with Seven Names*, Eleanor Estes's *Hundred Dresses*, Marjorie Flack's *Wait for William*, Helen and Alf Evers's *Chatterduck*, Winifred Bromhall's *Belinda's New Shoes*, and a host of other acceptable books direct the listener to meditate on pleasant actions and motivations.

The success of bibliotherapy will not be measurable for some time, unless we are willing to accept the reflections of our older citizens. But regardless of the fact that we cannot adequately measure the results, we should continue its use. This technique of directing behavior will be of value if pertinent factors are kept in mind.

1. The moral of the story must not be so obvious that it obscures the plot.
2. Such stories must never overbalance the literary diet of the young.
3. The story must be meaningful for the child.
4. The story should provide elements transferable to contemporary times.
5. The teacher must not discover and point out acceptable or unacceptable behavior traits in all forms of literature read to the child.

In direct opposition to the story approach is the direct experience theory of behavior training, which attempts to have the child see the reason for his behavior at the time it occurs. Such on-the-spot analysis is a difficult and demanding technique to handle. Some adults may be skillful enough to lead children to reflect immediately on the problem situation, but circumstances may intervene. When it is possible to analyze present acts, this technique provides a valuable lesson. However, all too often emotion is aroused to such a degree that intellectual reasoning is impossible. In such cases, it is often more advisable for the adult only to show approval or disapproval at the time the action occurs, remembering that when emotions or adult standards creep into behavior problems the young child needs much loving guidance and firm understanding. The most promising technique for universal use is the projective technique of puppetry. The extent and limitation of this approach to the analysis of behavior problems is shown in the illustrative lesson later on tattling, one of the most common forms of behavior, along with its cousin, gossip-

ing, found in man. Society frowns on either form of behavior; yet it certainly condones a social scene which rewards it in devious ways. When children enter school the educator, too, is faced with this type of problem. From kindergarten through the grades teachers are annoyed daily by such behavior unless the teachers and administrators reach an agreement on standards and put it into practice early in the child's school career. The illustrative lesson on tattling at the end of the chapter gives suggestions for the establishment of a standard and a technique for early training relating to tattling in the form of a puppet play.

The success of such a group-teaching device in attempting to modify children's behavior rests on various points which must be thoroughly understood by the teacher.

1. The children should have had an experience that contains the problem to be illustrated by the puppets.
2. The puppet play must present children with realistic behavior.
3. The action of the puppet play must be dramatic enough to bring the unaccepted behavior into the children's view.
4. There must be three definite divisions in the training lesson: first, the dramatization of the unacceptable behavior; second, the class discussion and decision on an acceptable behavior pattern; and third, the replay with the puppets portraying the acceptable form of behavior developed by the children's discussion.
5. Overuse of this technique may make it worthless; trivial application could result in a frivolous attitude toward it on the part of the pupils. It should therefore be reserved for recurrent and universal behavior problems.

The various techniques for teaching behavior standards and the environmental factors that surround the child in a group situation are the molds that form the personality. The plasticity of human development makes the mold a flexible frame that deserves and needs constant observation.

Social Studies

Having been influenced many years by the socializationist's point of view, the primary grades have developed units of social studies that lean heavily in the direction of changes of social behavior.

The young child needs systematic handling of many social problems which past generations have already organized into the fields of psychology and sociology. Instruction in social questions does not produce immediate changes in insight; however, it does impress the child with the need for disciplining emotions and recognizing the rights and wishes of others. In fact, both the planned and informal aspects of social behavior instruction guide the child into the realities that must be faced.

Social studies, at the primary level, on the other hand, attempts to make the child aware of the social order in which he finds himself. The basic goal of primary social studies instruction should be the child's gradual understanding of community life, its immediate institutions, and personal responsibility.

In checking typical public-school curriculum manuals, one will find listed for primary instruction such topics as "Festivals," "Community Helpers," "Transportation," "Food," "Circus," "Indians," "Clothing," "Zoo," "Hobbies," and "Vacations." If these subjects do provide valuable initial impressions for the above three divisions, then sufficient work has been cut out for these grades. We have not been too successful, however, in defending the topics under the present pattern of content organization which allows extreme freedom for teachers and schools in deciding which unit topics and materials to cover in the school year. Nor have we provided definitive scope, sequence, or balance in the social studies program throughout our schools. Frequently there is unnecessary overlapping between grades or there are gaps in fields covered, and all too often many topics are not even considered for any form of instructional treatment. Some social studies fields are approached from the adult viewpoint rather than that of the child. All in all, there are grounds for some dissatisfaction.

In the past very little time was allocated to this area in the primary grades. In fact, the term itself was seldom used, even in the middle grades where the curriculum included content that is now commonly grouped under the heading *social studies*. However, in the ensuing years, the curriculum grew to include economics, political science, anthropology, sociology, social psychology, and jurisprudence as well as history and geography. Schools met the onslaught in two ways. One was to continue to teach history as history and geography as geography but to bow to progress by changing the label in the cur-

riculum guides. The other method was to attempt to instruct children in a core program designed to integrate several specific areas into a common experience. At this point primary schools began the practice of calling certain activities or experiences which they found in their programs *social studies*. The term took root and came to cover an aggregate of many diverse projects and activities, including visiting community service people, mapping neighborhoods, and caring for pets.

The basic question the primary teacher will need to answer for herself is whether a unit or problem has been selected for instruction because of content or process. If the child is taken on organized field trips to the bakery and the firehouse in order to teach him how to behave in a group field experience, then the purpose is *process learning*. The content is only secondary and more than often eclipsed by the training provided in learning to get along with others. Such behavior training should be considered under the label of social relations, however; calling a field trip social studies does not make it a true example of that part of the curriculum.

A social studies unit should contain the material, tools, and scope that the specialist has provided for the content. There is some prior knowledge that can be brought to the social study to enable better future understanding. The child should learn more about geography if he has been impressed with his physical environment and is able to use it as a base. The child who is aware of his neighborhood as a group should relate that knowledge to future history studies.

This prior knowledge does not constitute social relations or social studies, but rather *social contacts* in specific areas that will affect the rest of the child's life. These social contacts may be organized around the child's personal life and the community and its institutions. Topics in this area that may provide material for unit presentation are names, schools, home, church, parks, playgrounds, trespassing, children's rights, animal rights, and work and play concepts.

Some of the problems in teaching either social contacts or social studies stem from the instruction that makes use of only a personal experience base. Maintaining depth and sequence is a constant task for teachers. Awakening the individual's or the class's interest in investigating topics and problems is only the beginning. Successfully taught, social contacts put more material within easy reach of the child. Pictures, reference books, and library facilities aid investiga-

tion, but reading matter alone cannot give depth and scope to social contact units. Even teachers who have built up an extensive file for recurring units will still feel the need for more primary source material if the unit is to be of value. The very nature of this area demands *accurate source material*. Mass communication makes it an unpardonable sin to present material that is not true. No longer will children believe that all people living in the Orient wear pigtailed or that wooden shoes are synonymous with Holland. The roving camera and microphone will soon make complete societies aware of how others look, feel, work, and play. Schools must be certain that the material they use supplements these eyes and ears of the world accurately.

Techniques

What methods will enable us to give the student reliable impressions and still have him identify himself with the topic or problem? It would seem intelligent to adopt those used by the social scientist: field inquiry, the use of primary source material, and utilization of the check-and-proof system.

We will encourage student identification by following the basic research procedure of on-the-spot or field observation. For example, the young child who is given a trip across town to compare the playground facilities of another school with those of his own or who discusses topics with other classes outside his own building can easily identify himself with a unit on schools. However, if such field inquiries are to be successful, they must be relatively free of long lists of dos and don'ts which are often imposed to make handling of such group enterprises easier; such rules (those of real value) more logically follow the problems that unravel after the first experience of a field inquiry. In addition, field trips must be directly related to a social contact unit under investigation. Meaningful expeditions require the use of a method of recording and comparing the experiences and observation of different persons, and simple statistical computation.

Young children need to have experiences with every tool that will make the social studies program more meaningful. By obtaining more primary source material on each unit and teaching the child to recognize primary material, we are doing him a lasting service for future endeavors. These early activities should impress upon children's minds that what they hear, read, and sense must go through verifying

inquiry. Is this true? How do we know? Who says so? Have we based our statements on ample evidence? Why do accounts vary? These and other pertinent questions make it possible to pattern the new on the productive scholarship of the past.

One method of inquiry which has often been considered beyond the capabilities of primary students is becoming so much a part of common knowledge that the time has come to reconsider it. The use of statistics to validate observations or statements should be part of the vocabulary in the upper primary grades. Intelligent discussion of *average man*, *average score*, *normal weather*, *central tendency*, and *sampling* will impress children with quantitative concepts they will encounter all their lives.

The thinking that the young will do in the area of social contacts will be determined by the identification each individual can make with the problem and the use he makes of the tools of inquiry along with the material we provide for instruction. The immediate goal is to build an accurate, sensible, and usable idea, but the long-range objective is to give each new generation fundamental experiences with collected knowledge. The primary child who is taught to approach the questions related to social contacts with the tools of the scientist will obtain evidence rather than vague relationships. These tools are not complicated instruments but rather purposeful activities which involve observing, checking, and recording.

Whenever primary children are encouraged to use other techniques to approach social studies problems, the outcome may be jeopardized. Encouraging them to imagine themselves as pioneers and write letters to satisfy both language arts and social studies unit work may foster fantasy at the expense of fact. Uncontrolled use of dramatization, historical fiction, imaginary trips, and substitute construction projects also cause misconceptions. There have been young children who for years firmly believed an igloo was made from lump sugar! Whenever substituting is done, children should understand why.

Helping children form social contacts from their exploration of the community takes considerable effort on the part of the teacher. She will need to collect purposeful activities, pictures, books, and artifacts that may be used for this task of building truthful and adequate social impressions. Controlled techniques such as the following may prove worth while.

1. Make field trips to visit grades in schools in other parts of town. Compare and record (in picture or alphabetical writing) the differences in play equipment, area arrangements, and school buildings. Field trips to schools and other community institutions which work with children (YMCA, YWCA, 4-H centers, neighborhood houses) produce experiences that the child can compare and evaluate on his own level.

2. Keep a collection of newspaper articles reporting community incidents. These articles may concern dramatic accounts of lost-and-found articles or cases of negligence involving young people as well as the more traditional happenings. Read the articles to the children without reference to the true persons involved and encourage them to discuss the principles in the cases. Use as many actual case studies as can be collected from daily papers, making the discussion a personal problem. These articles should be selected from the standpoint of fostering an awareness of contemporary social problems that involve the young child. Cases of trespassing, negligence, or race relations, for instance, will furnish valuable material for discussion.

3. Acquire from the state historical society exhibits, films, and books that may be shown in school halls, libraries, or home rooms. Exhibits of wild flowers found in the state, historical displays, and other materials are usually readily available to schools.

4. Have a permanent museum table or corner that will house the artifacts and articles that are collected around a certain social contact field. At Christmas time *piñatas*, switches, stockings, and similar artifacts of the festivals from around the world may be shown. Dolls and toys may be displayed to show their range of material and historical development. There is no limit to the number and character of the artifacts that may be used in the museum corner—the imagination of the teacher in this respect can either aid or hamper the insight her pupils develop.

5. Select dependable recreation books that present social contact topics and read these to the children. Books such as *Bright April* by De Angeli, *Tree in the Trail* or *Seabird* by Holling, *Matchlock Gun* by Edmonds, and *History of American Stamps* by the Petershams are excellent. The secret of pertinent use of such books lies in choosing ones that are both truthful and well written.

6. Construct simple time lines and charts for each pupil or for the class that show the holidays in relationship to the school year. Per-

sonalize the time charts by placing class events and pupils' birthdays on the time form as reference points.

7. Keep posted on the educational radio and television programs that will be shown throughout the year and have the class discuss their merits. Select commercial programs that sample phases of American culture ("Life of Lincoln," "Space Travel," "History of Flight," "Alphabet Conspiracy") for discussion, thereby also encouraging children to relate outside materials to their classroom instruction.

8. Encourage children to check the statements read or discussed in the class period. One student, making a report about dirt for gardens, made a comment about the number of angleworms in a square foot of dirt. Another pupil doubted the story. The teacher and the class encouraged the doubter to check by digging a square foot of dirt and counting the worms. Many similar occasions arise that can be used to develop a questioning attitude in the students.

The growth of the social studies field, so akin to Topsy's, has had disorganizing as well as constructive effects on the curriculum. Current impressional practices should be carefully checked to see whether they belong in the social studies area or perhaps might better be labeled with another term. It is quite possible that many of the units should be considered in the broad classification of social contacts. Schools may improve the content if definite periodic surveys are made to discover the scope and selection of study topics. Some states have invited social scientists to evaluate the course of study. This approach should lend direction to an overgeneralized field.

HOLIDAYS

Conservatively speaking, the primary school would lose an eighth of its content if holiday observance was dropped from the curriculum. Holidays give the primary grades some worthwhile topics for the program. Every modern holiday has history, cultural variations, symbols, family patterns, and value judgments entwined in its celebration. These should be deciphered for the children, and in each succeeding primary grade additional overtones and deeper meanings should be presented. However, much holiday instruction today concentrates mainly on how to make gifts or play games for amusement. These superficial activities may be part of the holiday study

but should remain subservient to the major impressions that can be gained.

For example, Halloween has grown in recent years to embrace the idea of "treating" needy children with funds for milk through UNICEF services. "Trick or treat" has become a national children's activity, and yet few children, or adults either, know all of its variations throughout the nation. Reference reading will show that jack-o'-lanterns were not always made from pumpkins and that witches may have had some connection with the three wise men. Halloween, like many other holidays, has valuable untapped material that can gradually be absorbed by the young.

The amount of time spent on the holiday will depend on the depth and type of material it is desirable to impress upon children. Some holidays require more study (Thanksgiving, Christmas, and birthdays), while others will receive only a slight impressional treatment. Personal holidays such as birthdays, Mother's Day, Father's Day, and special celebrations should be closely related to the family and the variations found in homes. National holidays, Thanksgiving, Veterans' Day, Memorial Day, Labor Day, and Independence Day along with the birthdays of national leaders may have more concentration at the upper primary level than at the lower.

Some of the old-world holidays are moving into new practices, and these should be compared with the way they were formerly celebrated. It is gratifying to see an old way of celebrating from the past emerge and gain popularity as has the construction of egg trees for Easter in the last few years. This charming practice might never have been revived without the Caldecott Award-winning book, Katherine Milhous's *The Egg Tree*. There may be many old customs simply waiting to be revived through historical study in the area of holiday celebrations. The young have every right to learn about their ancestors and their fellow men the world over through the window of holiday meanings and customs.

Valentine's Day has lost a little of the intimate luster of bygone years. Therefore, it may be the very holiday to employ for encouraging intercountry relationships. Instead of confining valentine giving to the area of their friends here, why couldn't children send valentines to children in an adopted city in another country? Many chambers of commerce in America have been urging their communities to become more conscious of cities abroad by proposing a "brother

city" plan. There may be other holidays in our culture that have reached their twilight zone of usefulness and that could be used in this manner to serve as another link of understanding and friendship between nations. Who knows the effects of an affectionate missive childishly aimed at hearts abroad?

Speech Training

Earlier in this book we cited the dictum that first impressions are the most important because they are the first. Such a statement as this is foremost in the thinking of any specialist seeking a place for his content in the primary grades. The statement is rhapsodic, that no one can deny, and many are mesmerized by its sound. Each area wants to be represented in the time schedule, and both teacher and administrator are reluctant to determine which should remain and which should not.

Speech training is one of these specialized areas. Most of the material requires only treatment of the impressional sort. However, as with all other areas, the major criterion must be the value of the content and the presentation at this point in the child's learning process.

Speech instruction that confuses phonic production with oral agility and endeavors to incorporate lessons which are not pertinent to the development of language in children is amiss. Furthermore, the young cannot easily see the value of exercises that are designed to coordinate the tongue muscles or to train the voice in tone intensity. Pitch, intensity, correct sounds, speech hygiene, and tongue coordination all are related to speech production, but many are directly embodied in other areas of instruction. In such cases it is usually better to allow the child to receive the training as the curriculum dictates.

Unless they have had effective speech training, classroom teachers will impress children with acceptable models far more efficiently by watching and understanding their own speech habits and production than by incorporating little-understood lessons for children's speech correction into the day's schedule.

Many times the young child, because of meager experience, does not make a sound in a seldom-used word which in more familiar words he can produce readily and correctly. On the other hand, he

may lack speech production facility. Without taking a sample word study of a child's speech, we can never be certain whether a child can produce a sound in a word. Speech correction is best left to the trained specialist. The classroom teacher should recognize her contribution as that of a commendable individual sound-speech pattern. Any auditory discrimination instruction will naturally serve the needed and different purpose of leading into reading and language instruction.

Tongue Twisters

Tongue twisters have been handed down since the days of the Romans. Aside from the speech ability involved, there is a cultural heritage that is being impressed on the young when they are used. Peter Piper's puzzling prattles to please the palates of pretty play-fellows perhaps and probably prove more positively and peculiarly pleasant than a profitable path to proper and plain precise pronunciation. In other words, *this pleasurable prattle is principally performed for play rather than profundity!*

Teachers may tiptoe trimly over the raw-jaw rumpus you ride when you pick a peck of queerish quibs to quiz Andres Airpump, Billy Button, Captain Crackskull, Dory Doldrum, Enock Elkrig, Francis Fribble, Gaffer Gilpin, Humphrey Hunchback, Imigo Impey, Jumping Jadken, Kimpo Kemble, Lanky Lawrence, Matthew Mend-legs, Neddy Noodle, Oliver Oglethorpe, Quixote Quicksight, Sammy Smellie, Uncle Usher, Vernon Veedon, and Walter Waddle.

The twisting road is enjoyable and leaves the impression that alliteration is pleasant to hear and agreeable to use as exercise for the tongue and teeth.

Health and Safety

Impressing the child with sensible health and safety habits should be done through interlearning. The teacher cannot expect the 4- to 9-year-old to control his environment in certain aspects of health or safety, as we have said; the child cannot demand a balanced diet from the adults who serve his meals. Neither can he be completely responsible for the safety aspects of his surroundings. Interlearning that permits him to react as the informed adult desires will direct him in the paths of healthy living and safe conduct. The adult must

set the examples from which the child can infer his definitions and interpretations of health and safety.

More meaningful health and safety instruction will be developed when the school considers the standards conveyed in the content. Much that is being done today fails to impress the young child because there are so many discrepancies between what we say should be done and what is actually done outside the schools. The following suggestions may disclose areas for improvement.

Sensible and reliable instruction concerning healthful living will best be given by physicians and dentists, who have a great wealth of information concerning children's physical condition. If the school wishes to present these topics in the curriculum, it must seek basic information from these professionals, and those trained to preserve health have the obligation to accept more responsibility in suggesting what should be used to impress the child.

School records of height and weight must be kept accurately. The child should understand that height and weight are developmental indexes and that, barring illness, they should slowly increase with age.

There should be a yearly check of the school environment that is provided for children. Lights, ventilation provisions, stairways, drinking fountains, toilets, and outside play equipment should come under scrutiny to ascertain whether a sufficient amount of care is given each facility. Constant vigilance on the part of administrators, teachers, and custodians in keeping the school's rooms clean and equipment in good order will set the example for interlearning.

The school can make the child aware of certain developmental features of personal growth through short, impressionally treated units:

1. Diseases. Why the primary child has more communicable disease than other children.
 2. The relationship of germs to sickness and personal acts that increase the passage of germs to others.
 3. The appearance and disappearance of teeth.
 4. Food tastes and their change and the enlargement of eating habits as time and experiences permit, as well as the role of culture and emotion in the acquisition of food preferences.
 5. The relationship of cleanliness to the germ theory and health.
- Touchy topics such as eating mucus from the nose and picking

scabs need treatment along with those more commonly taught habits such as washing after toileting and before meals.

The safety area of the curriculum also is best taught to the primary child by setting an example. Putting play equipment in the best place for safe play, checking equipment for wear and tear, and impressing children with things they can do to maintain or provide safe conditions should be among the automatic procedures of each day. There are, however, a few items that can be treated in short, organized units which will prove valuable in impressing the child with a sense of personal responsibility; among them are the topics of hazards, safe behavior, safety signs, and tools and their usage. The following questions may be used to introduce these subjects.

1. What is a hazard? Can I recognize hazards at school?
2. What is safe behavior on the school playground? What is safe behavior on a bus or on a field trip?
3. How can I safely walk to and from school?
4. What are safety signs and how do you read them?
5. Whom can you call in case of emergencies? Fire?
6. What are sensible and correct ways of handling tools like scissors, hammers, knives, needles, and saws?

With the realization firmly in mind that the primary child has little control over his environment, the teacher can present health and safety instruction realistically, remembering always that it is the example set by her, by the school, and by the community as a whole that will at this point make the deepest impression.

Films

Films, like books and other mass communication media, can bring children satisfying and valuable experiences. A good movie is as stimulating to intellectual action as is a direct tangible experience. Primary teachers must not accept the false belief that young children do not benefit from audiovisual aids as much as older children. The success the teacher has in using films, records, television, slides, stereoscopes, tape recorders, and radios depends on the skill with which she motivates the group to want to gain something from the instructional unit.

Part of the question of motivation lies in how much any one or

group of instructional aids is used. Just as teachers must prevent themselves from oververbalizing ideas or overdiscussing problems, so must they guard against overexposing an instructional aid. As yet, American schools have not equipped each grade with a movie projector, and this helps prevent wanton use of the medium.

The annotated list of films in Appendix 4 provides a basic group of audiovisual aids that should not be missed by children and should be used as a measuring stick for additional selections.

Summary

Anything is important to someone in this world, and the value judgments of large segments of society are responsible for creating certain standards. This fact underlies the primary teacher's task of deciding the treatment the content will receive. Stressing complex topics and skills with young children will be wasted effort and may even be detrimental to later learning. This chapter has emphasized that some areas of content should receive impressional handling in order to provide a longer time exposure for surer acquisition.

Impressional treatment initiates the primary child into ideas, material, experiences, and skills; this form of content handling exposes many areas but does not terminate training in any of them. It has been suggested that such areas as literature, music and dance, art, social relations, social contacts, speech, and health and safety should receive impressional treatment, some because of their complexity and others because of their relative value in society.

The nature of the child as well as the nature of the content determines the treatment of units. The young child should not be required to have more than a feeling about some topics because they are beyond his control or comprehension. Teachers will do well to consider these areas as productive of core experiences—but in the realm of feeling rather than as a basis for habit.

Illustrative Lesson: *Puppet Play on Tattling* (Kindergarten-Primary Level)

The teacher is seated with the children gathered in a semicircle around her.

Teacher: Yesterday I saw something on the playground that had a few of the first graders very excited. Do any of you remember

what happened at the outdoor play period that caused much excitement?

With this question the teacher pauses, allowing the children to recall the events of yesterday's play period. Several children may suggest things they feel to be important, but it is doubtful if any will recall the episode of tattling to which the teacher is referring.

Teacher: Yes, all of those things happened, but none of them is what I am thinking about.

We have two new friends at school today—perhaps they can tell us what I'm thinking about. No, they won't be people we saw yesterday, but let's call them Jinx and Minx: Shall we have them come out and show us what I'm thinking about?

The children's answers may be mixed, but in general they will be in the affirmative. The teacher has concealed behind her back two hand puppets and a lap board which is a plywood sheet 32 by 8 inches that will serve as a stage for the puppet play. She places the lap board across her knees and then, after the children have settled back, Jinx, the right-hand puppet, makes her entrance.

Jinx: (Calling as she pulls a toy wagon.) Minx! Minx! Come on out and play with me. I have a wagon and we can pull each other.

Minx: (Appearing from the left side.) I'm coming, Jinx, I'm coming. You pull me and then I'll pull you. (She gets in.)

Jinx: O.K. Jump in and keep your feet out of the wheels.

Minx: Whee—this is fun! (Jinx pulls Minx back and forth on the lap board.)

Jinx: Watch out as we turn this corner.

Minx: Oh—it's tipping! I'll get out and pull, and you take a ride. (Minx gets out of the toy wagon.)

Jinx: Take the turns fast—I'm not afraid.

Minx: Hold on—here we go 'round and 'round. (The teacher exhibits great enjoyment in the play of the puppets.) Boy, I'm tired. I'm going to lie down and rest.

Jinx: Me too. You surely do pull well, Minx. (Both puppets sit or lie down to rest.)

Minx: I wonder what's inside a wheel that makes it go around.

Jinx: I don't know. Just a wheel, I guess. Just a round thing, isn't it?

Minx: I don't know but I'm going to find out. (Goes over to the wagon and starts to pull off the wheel.)

Jinx: You can't get the wheel off. You're not strong enough.

Minx: Oh, yes, I am! (Minx pulls and pulls, but to no avail.) If I can't get it one way I'll get it another. (Minx then starts banging the wagon on the board, attempting to force the wheel off the wagon.)

Jinx: You're breaking it. I'm going to tell the teacher on you. (She runs away, screaming the statement.)

Minx: Tattletale, tattletale Jinx. (After a brief pause and a little activity concerning the wheel, Minx says to himself:) I better get out of here before that old tattletale comes back with the teacher. (Minx leaves.)

Teacher: Well, now, children, does that remind you of something that happened yesterday?

This episode should bring to mind a similar tattling experience, but if it does not, the discussion should be directed toward the puppet play. In the discussion of the play certain factors should be emphasized:

1. The puppets played well together until the tattling episode.
2. Minx's behavior in attempting to solve the question of what made the wheel go around came from a natural exploratory desire.
3. A standard should be developed for reporting to adults.
4. The teacher should guide the children's analysis to the adult standard on the premises that adults should only be brought into the problem when the parties involved have clearly stated to each other the foolishness of the unaccepted behavior.

A clear definition of this standard explained in the child's vernacular could be: "Never tattle to an adult until you have told the other person that what he is doing is wrong. Always give the other child a chance to see why you think his behavior could be better before you tell an adult." Perhaps even simpler is the admonition, "Do unto others as you would have them do unto you."

Immediately after the discussion period to develop a standard behavioral procedure, the teacher goes on to the third part of the training lesson.

Teacher: You children did a very good job in deciding on a better way for Jinx and Minx to act. It seems very sensible to me to tell a person who is doing something you think you don't like that what he is doing is wrong and give him a chance to change before you tell a teacher. Don't you agree?

But I wonder if Jinx and Minx have been listening. Do you suppose we have taught them something about how to behave? Shall we call them and see if they can play together now without tattling?

The children generally will answer in the affirmative, and Jinx and Minx will then be brought back on the lap board to re-enact the little problem play. In the replay the puppets repeat the situation, but substitute the acceptable behavior at the end.

Illustrative Unit:
Impressional Treatment of Halloween
(Kindergarten Level)

Halloween comes every year, and across our country children engage in activities that once held magical meanings but today hold only the

thread of pleasure. The holiday has become a day for children; yet failure to present some organized thought concerning the festival may well reduce the value the new generation will find in the event.

The treatment of this unit is only a passing form—a feeling for things that were, that are, and that can be. No attempt is made to give strict definition to the ideas and experiences that arise from teaching the concept of Halloween.

FIRST ACTIVITY

During class discussion the teacher asks the children to look carefully at the pictures on the work sheet she gives to each pupil. The sheet contains pictures of a heart, a Santa Claus, a witch, a jack-o'-lantern, a black cat, a broom, a ghost, a UNICEF box, and a bow and arrow. The children are directed to color those pictures that make them think of Halloween, using colors that remind them of Halloween. Repeat the instructions once or twice to be certain each child understands them.

SECOND ACTIVITY

Make enough bulletin board space available for the entire class to display material. Give each child at least five old magazines—especially old copies of professional and children's magazines such as *Instructor*, *Grade Teacher*, *Activity*, or *Jack and Jill*. Tell the children to look through the magazines and find Halloween pictures or ideas that express thoughts about the festival. The children may be instructed to place the pictures they find on the bulletin board, or a group may be appointed to arrange the pictures in some sort of order.

Read a book with the Halloween motif, for example, *The Book of Halloween* by J. W. Siddiqui, *Georgie* by Robert Bright, *Pumpkin Moonshine* by Tasha Tudor, *Heighho for Halloween* by E. H. Sechrist, or *Ghosts and Goblins* by W. Harper.

Place all available books concerning Halloween on the library table in the classroom.

THIRD ACTIVITY

Discuss with the children what they think each of the Halloween symbols means. Large cards may be constructed which will show the symbols—jack-o'-lantern, black cat, witch, corn stalks, trick or treat bag, and so forth. Have contributions in the discussion from both pupils and teacher concerning the ideas surrounding these symbols.

FOURTH ACTIVITY

Begin class activity by reading Nora S. Unwin's *Proud Pumpkin*. Discuss the story and the extension of the story, seeking information from the pupils concerning their own jack-o'-lantern experiences. Explain

throughout the discussion that pumpkins have not always been the only articles that people have used to make jack-o'-lanterns. After the conversation has culled enough information, tell the children about the construction project which will follow.

In several boxes there will be a number of apples, turnips, squash, eggplants, carrots, oranges, pumpkins, seeds, potatoes, and grapefruit. Suggest that each child choose an item and make a "proud jack-o'-lantern" from the raw material. This activity may well extend into a second day or a double period.

FIFTH ACTIVITY

During the day call attention to the Halloween symbols of trick-or-treat bags and UNICEF cartoons. Through discussion, give the impression that today's children may receive pleasure from trick-or-treating by (1) giving a treat to those giving them a treat and (2) cooperating with the world services of UNICEF.

Demonstrate and practice individual skits, songs, or treats that each child may return for treats given on Halloween night. Dramatize the way to react when meeting home occupants while trick and treating.

SIXTH ACTIVITY

Plan some form of costume show or construction activity. Children may want to make masks or simple costumes. Make a class project of several proposals that can be accomplished. The more mature child should be given pictures and information concerning the history and wide variation in the costume tradition of Halloween.

Read Louis Slobodkin's story *Trick or Treat*.

SEVENTH ACTIVITY

Many types of experiences may be planned for a class celebration of the holiday. Perhaps it is the custom in the school to have a party with the traditional games, a costume parade, scary stories, or a jack-o'-lantern display. In any event, gather the children together as they are dressing to leave for the day and tell them this story suggested by Elsie Zirwes.

Once upon a time there was a very weary ghost who sat pondering his woeful, dreary fate, chin in hand. (Teacher uses gesture and facial expression to enhance the story.) "There is no use sitting here," he thought to himself, shaking his head dolefully. "Halloween is almost over and everyone here has been scared away. Perhaps things are better elsewhere. I shall see."

The weary ghost stood up and looked to the right. (Have the children do the same.) *Nothing there*. The doleful ghost walked a

step and looked to the left. (Have the children look to the left.) He groaned. *Nothing there.* He looked in front but nothing was in front to scare. Suddenly the ghost smiled, turned around and began waving. Looking behind him the ghost found someone to scare. You will too if you turn around and wave as you leave the schoolroom. ". . . Boo!"

Skill Treatment

When one is skilled in some action, he is said to be master of the feat. Practice, overlearning, performance, speed, and expertness all seem to be embodied in the word *skill*; it would be advisable then to attempt to identify them clearly and apply our knowledge of each factor to those areas of specialization that are desired.

Yet the greatest problem for the adult guiding the child is not recognizing the factors that develop skill but determining the content which should be mastered. Twentieth-century life requires so much specialization that adults are prone to expect mastery from young children before it can be acquired; overanxious to start the child upon the road to the cultured life, we ask adult or mature reactions of him before he has conquered basic meanings. American society is variable—as are class aspirations—and a conscientious teacher of the young will be reluctant to require mastery of any content at the early primary age. On the other hand, research psychology's investigations show that behavior may be fixed through efficient stimulus-response reinforcement procedures, and mechanical teaching devices have been adapted from the ideas of S. L. Pressey and B. F. Skinner. The major question is, then, to determine the content or behavior we would like young children to master.

Once again, the selection of the content to receive skill treatment will take into consideration both the nature of the child and the nature of the content, along with an extra element: the time that is required for mastery. Using these three factors, teachers can run down a subject or activity list and select from among the many content areas those in which they seek expertness.

Before any such selection is made, however, a broader concept of areas requiring skill treatment should be considered. Under the usual

classifications, it is natural to think of the content as coming from such fields as language, arithmetic, art, or music, but some material suitable for skill treatment may not fall comfortably into those classifications. There are basic areas in which a fixed result is highly desirable in the primary years; there are many others to which one can hope only to apply foundational or impressional treatment. Given these larger categories, two distinct groups of acts become apparent: *operational acts* and *manipulative acts*. These should receive heavy emphasis, for if the child is not proficient in them, his success in the finer elements of traditional content classifications will be limited.

Operational acts include listening and following directions. *Manipulative acts* range over the mechanical processes of cutting, coloring, tearing, folding, copying, pasting and marking. Operational and manipulative skills together form the child's ability to respond with comprehension and to apply his intelligence. Such behavioral acts unquestionably fall into the instructional field of our schools because the classroom is able to provide activities and motivational experiences that teach mastery.

The aim of primary skill treatment will be to lead the child to levels of increasing accomplishment in these behavioral acts. For example, the kindergarten child will learn the art of handling blunt-nosed scissors, while the third grader is qualified, because of his previous experience, to overlearn the art of using tin shears, large sharp-pointed shears, and the dozen or so various cutting tools. Each manipulative or operational act is part of a pyramid of related experiences that will support further learning at each grade level. By the end of the primary grades, then, the skill will have become an overlearned act and concept. Knowledge of the integral parts of each action will indicate many directions primary teachers can take to insure the overlearning of both operational and manipulative acts.

Operational Acts

Listening

Much has been said and written about teaching children to listen. Most of the thinking on the subject concludes that listening must be taught and that comprehension is the criterion to use for evaluating the degree of listening.

Listening must be taught from its own content base and not from

comprehension or knowledge of what has been said in a particular lesson or story time. Listening is not only the means of registering the world around us, but in this century is an explainable act incorporating words, laws, and theories. Unless the child is taught *what* listening is, we are defeating the admonition we so often use—"Now, listen!"

We should begin by asking ourselves two questions in connection with listening: what do we do when we listen? and what do we do when we don't listen? Serious consideration of the second question may throw more light on the subject than will the first avenue of pursuit.

Fundamental to the act of listening are the unique and individual abilities of *perceiving* and *selecting*. The part of perceiving necessitates that teacher and pupils distinguish sound and noise and verbalize workable definitions of each so that skill treatment may be applied. Children should not be encouraged to listen consciously to all noise and sound but only to that which they discover to have meaning in a situation. A child can learn through comparison of vibrations in life experiences those that cannot be exactly repeated (noise) and those that have a definite pattern and can be repeated exactly (sound). Meanings may be applied to or derived from both noises and sounds, but perception is directly related to sound rather than to the hodgepodge of noise. Sounds are patterned and have characteristics of music or tone, while noise is unrhythmic, composed of random tones, pitch, and waves.

Such noises as windows slamming, doors closing, objects falling, or persons fidgeting under usual circumstances are inconsequential noises in life situations. But discerning the difference between a noise and a sound is a choice reference. The human ear perceives far more than needs to be registered; even children are shocked when taped class situations are played back and they discover that noise dominates the recorded sounds.

Perhaps we may best teach listening by directing children's attention to all the noises and sounds available for perception, and then making them aware of the importance of selecting the most meaningful sounds or noises to register. As she provides field and class situations for sound-noise analysis and discrimination, the teacher can lead children to discover that sound is produced by three agencies: the *elements*, *human sources*, and *mechanical*

sources. The procedure should be to go directly to the source of the vibrations, and then attempt to train the child to understand and verbalize his response. If we can provide experiences in the early years of school that teach children the difference between sound and noise, we have accomplished the first step in directing the listening act. Knowing differences, recognizing who or what made a sound or noise, and understanding what the noise was should lead to lessons that encourage children to develop the skill of placing appropriate value, called *ordinal value*, on registered vibrations.

An understanding of the relationship between noise and sound, the sources of production of each, and the best ordinal value placement of consciously registered vibrations cannot be mastered without multiple experiences. Many types of situations can be recorded and played back. If records or tapes are not available, the actual practice and training sessions can be taught from the here-and-now activities in the classroom. The young child should know thoroughly the operational definition that sound has a specific meaning or meanings, and that noise is random or unrepeatable vibrations. As this is repeatedly demonstrated, a gradual increase in ability to determine the ordinal value of sounds will be observed. The ordinal value, which must not be confused with what sound was heard first, refers to the selective value position given to registered vibrations. It is ordinal value that determines the meaning of listening situations. As the child perceives himself selecting which things to listen for, the teacher avails herself of the opportunity to train him in the unique, individual act of critical listening.

Some readers may feel that the instruction described above is beyond the comprehension of the young child, or that it holds no importance for his education. Yet it makes far better sense to the writer for teachers to try such sound-noise analysis rather than deliver the scoldings so common in classrooms given because children were "not listening." In reality, the children were *listening*, but they were not *registering* the particular sounds that at that moment the teacher believed should be given first value.

Given that effective training in listening can be provided, the following steps are suggested for instruction:

1. Analysis of sounds and noises
2. Identification of production forms

3. Registration of sound-noise vibrations
4. Ordinal value of vibrations

Subsequent activities involve the mental feature of retaining meaningful impressions. The practice of recalling sounds registered yesterday, last week, or perhaps a year ago enlarges the scope of the listening program, and should start discussion of the questions of why we forget and how we can remember longer. Children will come to realize that it is easy to remember a fact if it was marked by a pleasurable or a painful feeling, and parents, as they register their children's growth over a span of years, can verify that the children's memory is affected by likes and dislikes and accompanying pleasure or pain.

Much that is heard, registered, and selected is forgotten, and forgetting seems to be essential to mental health. Forgetting then should be respected as well as remembering. If children can learn to identify and verbalize remembering, forgetting, sounds and noise, and vibration production, we may not need to say so often, "You're not listening." In fact, we might more meaningfully exclaim, "You're not selecting and registering the things you should."

Having had three or four years to accomplish this feat of skillful listening, children will approach the intermediate-level teacher better prepared for other important content areas.

Listening, we must remind ourselves frequently, is a unique act determined in part by the make-up of each child and in part by the emotional and environmental experiences established prior to the initial training. If we could understand these factors thoroughly, we could take a great deal of the guesswork out of education.

At our present point of understanding, merely recognizing that individuals differ in physical ability to perceive is helpful. For example, seasonal deafness or organic conditions can curtain sounds. Audiometers for testing hearing acuity are available to schools, and the nurse or specially trained technician may adequately measure the frequency range of each child. Constant care on the teacher's part in observing the effects of postnasal drip or sinus infections pays dividends.

If we can make the child aware of how the meaning of things heard is colored by his emotions and physical conditions, we may have tapped a resource for developing critical abilities.

The teacher can influence children toward personal control of thoughts by verbalizing with them the differences between sensations, perceptions, and generalizations. To do any of these three, the child must have words with which to tag an act or experience. Language and listening are indivisible because silence is also a definable thing. The matriarch of Italian teaching theory, Maria Montessori, directed children in her school to become aware of their individual responsibility in listening. Her lessons on "inner" hearing, the twilight zone of silence, and invading noises have bearing on the personal factors in listening. Reappraisal of Dr. Montessori's work in this area may lead to promising techniques for today's classrooms.

Listening is a major operational act that must be understood from a *production base* rather than from an *observational base*. Lists of listening types, such as intermittent, passive, responsive, or intent listeners, only describe the behavioral act. Primary education sets out to train or retrain the habits needed for intelligent living, and description is only the beginning. Sample illustrative lessons at the end of the chapter are suggested as a means of applying some of the points that have been made in these pages.

In *Listening Aids Through the Grades*, David and Elizabeth F. Russell make a distinction between *listening* and *auding*. Auding, to these writers, means "listening with comprehension to spoken language," while listening is "simple perception of sounds and words."¹ If using the term *auding* will make adults and teachers conscious that in this twentieth century there is an assault on the children's ears of an overwhelming amount of useless information, then by all means let us change terms and make *auding* an operational skill.

Children need more lessons that define individual differences in auditory acuity, discrimination, and comprehension, skills that are not taught by the hundreds of games that make them conscious of what sounds a dog hears. What meaning are we teaching when primary children are asked to identify such sounds and noises as crushing paper, tapping on glass, blowing a harmonica, or slamming a window unless these are presented in fields where the sounds become meaningful to the situation? Teachers must be careful that

¹ David Russell and Elizabeth F. Russell, *Listening Aids Through the Grades*, Columbia University Teacher's College, 1959.

they do not become like the fox in the wise and old fable who had a cupboard of activities but could not use them appropriately.

Listening behavior is in a real sense a concept. If we consider the world of sounds, noise, silence, emotions, and organic facts, we have a collection of elements and conditions that should make listening a basic content area in the primary grades. If we but make an attempt to dissect the environmental acts that color, direct, and produce sounds, we tune out the noise that is jamming the waves.

Following Directions

Another operational skill that should be established in the primary grades in anticipation of future school and life needs is that of *following directions*. The young child in the infant and preschool years is guided along paths of "follow the leader" and is given many incidental and informal lessons in heeding instructions. As he grows, his developing personality sometimes interferes with efficient direction following. Adult directions may not seem logical or essential in the child's world. Quite often in specific situations his feelings and emotions become so mixed that the child loses his way and founders without guidelines.

However, training in following directions should not be thrust upon the primary child until dramatic situations are observed that clearly show its necessity and value. The base for need fulfillment may be an event such as the ruining of a paper or a picture—which to some children is a very real tragedy—as the result of faulty direction following. Let children have experiences of this kind in kindergarten and the first grade and then use them to identify the correct and efficient behavioral acts. Teaching sequence of steps and methods for remembering how to do the given tasks are two approaches to the subject.

If we can guide children to organize tasks in ordinal and sequential position, we shall eliminate a great deal of wasted effort. Children do not have sufficient background to see the value in instructions, especially if they have not themselves wasted and misspent enough time and effort to compare and transfer the experiences. Planned lessons to identify the results of poor direction following and to train the child to remember sequential steps will help him to develop this valuable skill.

Projective techniques such as the puppet play illustrated in Chap-

ter 6 also provide good approaches to the subject. Teachers may also modify puzzle boards as used by Mary Keister to influence children's behavior.²

Direction following may be taught on a logical base by transmitting its three components. First, the product or act to be accomplished must be inhibited. This inhibition factor makes the child stop the trial-and-error or fumble learning and take the second step of effective direction following: reflection on ways to proceed before rushing into action. At this point the teacher can help by giving proper and understandable directions. This phase may be hindered by inability to follow the steps or by competitive thoughts. If the directions are within the range of his capability and his emotions and thoughts are not interfering, the last step is carrying the directions given into action.

A teacher who wishes to utilize these three properties of direction following may plan several lessons like the following:

The teacher tells the group that today they are to make a complicated article. It is to be a tagboard pinbox that will be given to their mothers as a Mother's Day gift. She asks them to watch and listen carefully and see how well they can follow all of the steps in the construction of the box. She then gives simple but multiple directions. She makes no attempt to confuse but to misdirect the children with difficult instructions. She does add *many* parenthetical remarks about how the mothers will be pleased, and asks the children about their mothers' favorite colors. These remarks surround the directions being given, and are abundant enough to inhibit the children in following the step-by-step directions.

The class then is given the raw materials for the project and asked to begin the construction. After a great number of failures or questions, the class is brought together and told that the lesson was difficult because of something the teacher did. She gives the children an opportunity to express what it was that caused so many not to be able to follow the steps demonstrated.

Following this, the teacher should demonstrate with a clear, perhaps pictorial step-by-step procedure. The children are then allowed to reflect and ask questions before the task of constructing the box is begun.

² Roger G. Barker, Jacob S. Kounin, and Herbert F. Wright, eds., *Child Behavior and Development*, McGraw-Hill, 1943.

When followed by action in the classroom, this method will allow the child first to begin many activities before he is shown ways of doing them. Then, after a few fruitless attempts, the teacher will proceed to give the directions necessary for accomplishing the tasks.

As children accumulate experience, they will naturally learn the importance of following directions, but allowing the skill to be learned solely by trial and error makes its development a slow, piecemeal affair. Training the child through his own specific identifiable behavior should remove these operational acts from the category of rote learning and put them into a logical framework. Giving the young words, sentences, and thoughts that involve acts creates a positive and direct association among cues, responses, reasoning, and overlearning.

Manipulative Acts

There is a cluster of motor-coordinating acts that, when mastered, give the child a feeling of satisfaction and enable him to use the learned responses for investigating many content areas. These related manipulative operations include cutting, coloring, tearing, folding, marking, and pasting. Some curriculum patterns consider them as part and product of school activities; others allocate some of these operations to the art field. Both viewpoints put manipulative acts in a different light from that in which they actually function, for they are really bridging activities, the physical techniques man uses in delineating an idea or content. Because they are so valuable in every phase of education, such acts should receive skill treatment during the primary grades.

Mere practice of these acts does not insure mastery. Each should be taken singly and given in formal lessons to develop an understanding of the act itself and its applications. For example, the child should not handle scissors for many years without some training in why thumb and middle finger are more efficient than thumb and first or thumb and little finger. Ways of holding the paper while cutting, techniques of leveling the scissors with the paper, and other individual problems should be discussed with the primary child. Children may pass through years of fumbling if the school does not consider these important operational acts as instructional content.

The concept of cutting involves not only a pair of scissors and a

snipping motion but a collection of facts, tools, and uses that man has developed for various operations. Consider the ideas and problems a child will think about if the primary teacher introduces him to just the various physical properties of scissors: there are pinking shears, kitchen shears, sharp-nosed and blunt-nosed, long and short, manicure scissors, surgical, wire, tin, hedge, plastic, and on and on. Within the scope of the manipulative act of cutting—and all others—are informal lessons in history, sociology, and physiology that can be absorbed by the primary child.

Relating these manipulative acts to the concept of art or construction activities focuses attention on the *product* and not the *act*. The product can never be successfully made unless the child has mastered the manipulation needed for it. Each of the techniques—checking, folding, pasting, marking, copying, and cutting—should receive skill treatment through independent and repeated lessons. Redirecting many construction lessons might show the unlimited possibilities of manipulative activities, and these should be oriented toward teaching skill with the tool rather than toward completing a project product.

For example, the teacher might place on a table a number of tools used in the construction of projects in the classroom—scissors, paste, pins, stapler, rubber bands, paper, tagboard, crayons, paint, and pencils. The teacher shows the children several construction projects, each requiring the use of one or more of the items. The directions ask the children to choose a part of the project that will use only one of the items on the table. When the choices are made and any necessary discussion finished, the children are given the opportunity to accomplish one of the number of projects presented earlier. The teacher tells the children that she will come to each pupil individually and question him about what tool he used and why he selected it. By so doing she has concentrated attention on the act and its successful accomplishment rather than on the product and its completion.

Summary

The operational acts of listening and following directions can be learned in the primary grades, and will be of great value to the child in the future. In like manner, young children are capable of

developing certain manipulative acts to the skill level; not only will the learning provide a foundation for work in the upper grades, but the child will find much satisfaction in being able to handle tools efficiently.

There will be those, of course, who fail to recognize the need for skill development at early ages. Yet they will often be the same teachers who demand skill accomplishment by the end of the third grade, completely disregarding the obvious need for long and systematic instruction to master such complicated processes.

If primary education is to succeed in its goals, it must realize that because it deals with the child first in the formal sequence, it must therefore accept and accomplish the first tasks—those upon which success in the following years relies so heavily.

Illustrative Lessons: Listening

Illustrative Lesson 1:

I. ANALYSIS OF SOUNDS AND NOISES—WHAT DO YOU HEAR?

Choose a period of the day when pupils can hear sounds in the street, halls, or classroom. You may say, "Let's all sit as quietly as we can. Now, what different sounds can you hear?" Make a list on the blackboard—you may invite pupils to whisper what they hear and tell you as you write on the blackboard. When the list contains man-made, machine-made, and natural noises and sounds, begin the pupil-teacher discussion with the types of sounds and noises the children heard.

Repeat the lesson enough times so that the majority of pupils understand how to classify types of sounds and noises according to man-made, machine-made, and natural. There may be subdivisions of these types, such as animal sounds or artificial sounds.

Use a tape recorder, records, and field trips to add to the list of sounds and noises.

II. DIFFERENCES BETWEEN SOUNDS AND NOISES

After the children are able to identify different sounds and noises by types, ask them to tell you what the differences between sounds and noises are. Bring out these points:

Sounds: repeatable, patterned, regular

Noises: not patterned, irregular

Vary this form of lesson until the children understand that sounds can be repeated exactly and noises cannot.

Have the children listen while you read sentences, making some of them

sound more like noises than sounds by poor pronunciation, mouthing, muttering, and illogical stressing.

Read a story to the children and ask them to find the more important sounds or noises. For example, traditional folk tales such as "Teeny Tiny," first recorded by Halliwell and later modified by Carolyn S. Bailey in *Firelight Stories*, will prove useful. This particular story is valuable in that the constant repetition of the words *teeny tiny* causes ordinal change in listening habits. The use of a low whisper for the mysterious voice demands class attention. Collecting and making stories will aid the teacher greatly in providing listening lessons.

Illustrative Lesson 2:

- I. To provide a pleasurable experience that establishes the existence of "inner" hearing, have the children arranged for roll call. Students should be asked to settle themselves in a comfortable position and to remain as immobile as possible for the day's roll call. Then call each child's name in a whisper. Sometimes do not voice a word or complete sound. The child signals in any fashion he chooses that he heard his name. You may move about the room and direct the whispers from various angles. Allow children to read lips and vary these exercises by whispering sentences that are to be repeated by the child whose name is called.
- II. To guarantee the knowledge of what listening comprises, make bulletin board displays of visual and alphabetical pictures on the subject.

Illustrative Unit:

Skill Treatment of Manipulating Scissors

Because the act of cutting should be developed to the point of a habitual response at least by the end of the primary grades, this unit should appear in some form at each level. Many projects will be presented throughout the school year which will require cutting, but a systematic arrangement of cutting experiences will direct attention to the operational act and not the product.

FIRST EXPERIENCE

The teacher will have a large cardboard carton in which all the available tools for cutting have been placed. These should include blunt-nosed scissors, sharp scissors, wire snippers, hedge clippers, tin shears, pinking shears, large cloth scissors, thinning shears, hair clippers, buttonhole scissors, fingernail scissors, wallpaper cutters, pedicure shears, linoleum knife, electric scissors, plastic scissors, lopping shears, and thread clippers. If it is not possible to furnish the actual tools, pictures from a catalogue will suffice to illustrate the number and types of cutting tools available.

The teacher may call on several children to select a tool from the carton and attempt to tell the class what type of material it would cut, how it should be held, and what care it would require. Those instruments that no child can name or explain the use of should be put into another box marked "Unknown."

After this experience ask the children to seek information from home or community resources which will explain the unknown instruments.

SECOND EXPERIENCE

This lesson is designed to give individual instruction concerning the most effective way to hold scissors. The teacher may have both wire snippers and paper scissors for demonstration. In the class discussion the teacher and a few children can demonstrate the difference in holding the two tools. Providing the material for each tool and allowing a sufficient number of children to demonstrate how to handle it will lead the class to some general conclusions.

Ask the children if they noticed which tool needed to be held with the thumb and middle finger. Through handling and observation have the children find the answers to and reasons for these questions:

1. Why is it better to use the thumb and middle finger rather than the thumb and pointer finger to hold paper scissors?
2. Why is it better to hold the material still when cutting with paper scissors?
3. How wide should you open paper scissors?

After the demonstration discussion, have a short practice period with scrap paper.

THIRD EXPERIENCE

This lesson is designed to provide practice in holding and cutting with paper scissors. The children are told that cutting is an activity which they will use a great deal the rest of their lives. Practice in the activity will help them improve their skill, but they must not expect to be able to cut everything in a few days. Each child should have a pair of scissors and several sheets of light tagboard or manila paper. The lesson sheets that the teacher presents for this practice include several tasks.

The first sheet is printed with vertical straight lines. The first three lines are approximately a half-inch wide, for ease in following. The succeeding lines grow smaller in width until they become fine lines.

The second worksheet has lines printed at an angle, again grading from wide to fine.

The third work sheet has zigzag lines and provides practice for more intricate cutting.

The fourth work sheet has lines printed in a continuous concentric circle. This phase requires more demanding cutting technique, and the teacher should give special encouragement to the children who might feel frustrated because they cannot accomplish the feat. Cutting should be a pleasing practice period.

There will be children at any level who do not need much practice on some of the sheets. Walk among the pupils during this period and notice the individual level of cutting ability, and allow any child who needs it to concentrate on the sheet developing the ability he lacks.

This lesson should be repeated until all the children have been able to determine what type of cutting needs the most practice. This experience can be varied by changing the forms of the lines, and changing the weight of the paper in the work sheets or using materials with different textures will give the children more extensive practice.

FOURTH EXPERIENCE

The purpose of this lesson is to discuss and demonstrate the need for safe handling and good care of scissors. At the back of the room place several pairs of different kinds of scissors. Call on various children to bring the scissors from the back of the room. As they do so, discuss whether they performed the task with the best safety features. Discuss and extend each child's ability to hold scissors, handle them properly, and care for cutting instruments, and give each child ample practice with these tools.

FIFTH EXPERIENCE

This lesson is directed toward the skill involved in holding various materials while cutting them. Cloth, plastic, wax paper, tagboard, and slick paper may be used. Arrange the children in groups of three or four and let them explore the various techniques that may be used in cutting different materials. Provide a sufficient number of tools and pieces of cloth and paper for the lesson.

SIXTH AND FOLLOWING EXPERIENCES

Throughout the primary grades have many projects that demand cutting as one of the manipulative acts. Occasional recall of types and handling and care of cutting tools should be brought to the foreground. As a child acquires skilled use of paper scissors, introduce other forms of implements and their applications—for instance, fingernail clippers, cloth shears, and pinking shears.

Do not at any time confuse the skill of the manipulative act of cutting with the art process. The skill may well be used in the art process, but to attempt to develop it there is to ignore the child's need to develop the skill in itself.

Selection of Unit Topics

This material appears here because at this point in the discussion of content the three methods of treatment—foundational, impressional, and skill—have been presented. Only with an understanding of the three methods will the following suggestions have any merit.

One of the classic pitfalls in primary education is the assumption that certain content areas introduced in the early years should be established as skills and treated as such. Following suggestions in these pages on what material should receive skill, foundational, and impressional treatment, it would appear that a great many areas now being treated as skills should be considered foundational; these are areas in which a strong and thorough foundation can be laid in the early years, but in which skill accomplishment can be expected only after long-continued training that is far beyond the primary school. With that in mind, then, it is wiser to view the content of the curriculum in a strict sense, identifying the basic aspects which not only are essential to the accomplishment of primary and the future curriculum needs but can be completed within the primary years.

In the majority of primary schools auditory discrimination, left-to-right reading, visual discrimination, counting, writing, speaking, and certain standards of conduct are given skill treatment. Close scrutiny of each of these areas will reveal that though some phases may be mastered by the primary child the great bulk of the content may be handled successfully only with impressional or foundational treatment. Hurrying the young child to overlearn and fix certain parts of the content before he has had sufficient time or experience to assimilate them is encouraging needless rote learning. Whatever we do, we must not rush culminating instruction of fundamental areas such as writing, reading, and numbers. The child must see logic and reason in what is to be mastered.

This overanxious approach is exemplified by those methods that aim to teach "reading with expression" by the end of the first or second grade. The beginning reader first needs to acquire fluency in the reading process, and attempting to make him read like a trained actor is out of keeping both with the task and the capabilities of the

child. Some children will naturally reach this point long before others, but they are rather the exception than the rule and are not reliable models on which to fashion the curriculum.

All of the areas of instruction in the primary years should be given critical scrutiny by the profession as a whole and by local school personnel. Consideration of the length of time an area is given in the school day and the number of years that a subject is handled under our typical school plan will help determine which content areas should receive skill, foundational, or impressional treatment. Periodic checks may lead us to place different teaching emphasis on some of our content and modify some present practices. Rushing a child into areas that we want him to conquer is as dangerous as holding back or watering down. Constant reappraisal and controlled research would reveal the paths to follow.

Students and teachers are always searching for worthy topics that incorporate worthwhile experiences for school unit organization. Teaching units are the related experiences and activities that arise from a carefully selected and developed concept. The list of suggested topics below aims at making students aware of the possible units that can be organized around concepts that justify careful study. Children's interest is not the major criterion for accepting a topic for study; all topics must be significant and challenging.

This list also indicates the possible level at which the topic would appear for instruction. Some topics should be presented at several levels and given extensive handling through the primary grades. The column marked *Area* classifies the content area of the topic. The last column, titled *Treatment*, indicates the type of unit handling that is suggested for the topic. Those units given impressional treatment are designed only to acquaint the class with the topic and the related experiences, to give a feeling for or an introduction to the content. Foundational treatment differs in that its goal is to teach the child verbalization of the topic; the child learns a basic vocabulary that enables him to think further in the area. Material given this treatment cannot all be absorbed in the primary years, but verbal and meaningful experience with these topics will equip the child for more mature learning. Skill treatment insures over-learning—children who have a topic under this handling will acquire a habitual reaction to the material.

Selected Topics for Unit Organization

TOPIC	POSSIBLE LEVEL	AREA	TREATMENT
Schools	K-1	Social contact	Foundational
Names	K-1	Social contact	Skill
Operational Acts	K-1-2-3	General education	Skill
Drawing			
Coloring			
Cutting			
Pasting			
Tearing, folding			
Molding forms			
Manipulative acts (marking-writing)			
Holidays	K-1-2-3	Social contact	Impressional
Halloween			
Thanksgiving			
Christmas			
Valentine's Day			
Easter			
Mothers' and fathers' birthdays			
Personal birthdays			
Special events (Book Week, Education Week)			
National leaders' birthdays			
Dolls	K	Social contact	Foundational
Mother Goose	K	Social contact	Foundational
Play-work	K-1	Social contact	Foundational
Physical development	K-1-2-3	Physical education	Foundational
Sounds, noise, words	K-1	Language arts	Foundational
Gestures	K-1	Language arts	Foundational
Picture writing	1-2	Language arts	Foundational
Alphabet writing	1-2-3	Language arts	Foundational and skill
Basic geometric shapes	K-1	Language arts	Foundational
Books—library	K-1-2-3	Language arts	Foundational
Community signs	K-1	Social contact	Foundational
Vacations	1-2-3	Social contact	Impressional
Clocks	1-2-3	Arithmetic	Foundational
Calendar	K-1-2-3	Arithmetic	Foundational
Money	1-2-3	Social contact	Foundational
Music	K-1-2-3	General education	Impressional

Selected Topics for Unit Organization

TOPIC	POSSIBLE LEVEL	AREA	TREATMENT
Dance	K-1-2-3	General education	Impressional
Art	K-1-2-3	General education	Impressional
Dramatics	K-1-2-3	General education	Impressional
Scientific thinking	K-1-2	General education	Foundational
Scientific products	1-2-3	General education	Foundational
Scientific principles	2-3	General education	Foundational
Storytelling	K-1-2-3	Social contact	Foundational
Measurements	1-2-3	Arithmetic	Foundational
Fractions	1-2-3	Arithmetic	Foundational
Band and orchestra	1-2-3	Social contact	Impressional
Behavioral acts	K-1-2-3	General education	Impressional
General rules			
Talking			
Taking turns			
Persistency			
Listening			
Conversation			
Sympathetic traits			
Fear reactions			
Reading	1-2-3	Reading	Foundational
Word recognition			
Meaning of words			
Meaning of the reading process			
Current events	K-1-2-3	General education	Impressional
Parks and recreational	K-1-2-3	General education	Impressional
Inventions	2-3	General education	Foundational
Recreational reading	K-1-2-3	General education	Impressional
Recreational activities	K-1-2-3	General education	Impressional
Counting	K-1-2-3	Arithmetic	Skill
Poetry	K-1-2-3	General education	Impressional
Gardening	K-1-2-3	General education	Impressional
Number bases	1-2-3	Arithmetic	Foundational

Part III

Field Application

The Man, the Boy, and the Donkey

A man and his son were once going with their donkey to market. As they were walking along by its side, a countryman passed them and said:

"You fools, what is a donkey for but to ride upon?"

So the man put the boy on the donkey and they went on their way. But soon they passed a group of men, one of whom said:

"Look at that lazy youngster. He lets his father walk while he rides."

So the man ordered his boy to get off, and got on himself. But they hadn't gone far when they passed two women, one of whom said to the other:

"Shame on that lazy lout to let his poor little son trudge along."

Well, the man didn't know what to do, but at last he took his boy up before him on the donkey. By this time they had come to the town, and the passers-by began to jeer and point at them. The man stopped and asked one group what they were scoffing at. The man said:

"Aren't you ashamed of yourself for overloading that poor donkey of yours—you and your hulking son?"

The man and the boy got off and tried to think what to do. They

thought and they thought, till at last they cut down a pole, tied the donkey's feet to it, and raised the pole and the donkey to their shoulders. They went along amid the laughter of all who met them till they came to Market Bridge, when the donkey, getting one of his feet loose, kicked out and caused the boy to drop his end of the pole. In the struggle the donkey fell over the bridge, and his forefeet being tied together he was drowned.

"That will teach you," said an old man who had followed them.

"Please all, and you will please none."

It is an impossible task to attempt to please everyone. Fortunately, the educator's task is not one of pleasing, but rather of accumulating all that the civilized world has to offer the young child and presenting it in a manner in which it can be grasped. The task is not without its hazards, of course. The major difficulty lies in the indisputable fact that society does not always behave in a civilized fashion, which is most disillusioning to the young.

It is because of the fact that people, groups, and nations do not always operate with the most effective and moralistic procedures that some educators have slipped into thinking that the task of teaching on the highest level is an impossible one and have confused it temporarily with that of pleasing their clientele. The latter aim appears to be much the simpler and easier one to attain—at least, for a while. However, before long one finds oneself in the same position as the man, the boy, and the donkey. Organized education has its historical roots planted firmly in the moral laws of nature and religion. It cannot escape the principle that much of education is necessary for the ideal state of existence. When it directs its course mainly toward utilitarian goals and fits its curriculum to special-interest groups, its influence is curtailed. However, when teachers affirm the ideal goal of enlightenment, organization, and progress for the child along the path that provides more positive ideas than one individual can assimilate, then they are helping in the task of producing responsible and reflective citizens.

The educator's task is a challenge also because the individual pupil does not always desire to respond or to accumulate the thoughts and material presented. Children, sadly enough, are sometimes as rigid as adults are in accepting or absorbing ideas. Furthermore, teachers of the young, because they come first in the organized pattern of instruction, are under an obligation to fix firmly the

positive keystones in the child's educational foundation, and this requires accepting the challenge and understanding the purpose of organized education. These purposes will best be satisfied if the inertia and stumbling blocks ahead are foreseen. Both society and the child at times exemplify the inertia that must be overcome. The best approach is to accept the belief that time and effective methods will produce progress—progress that will establish fixed, verbalized, and recognized elements of culture in all people.

This section attempts to pull together some further components of the teacher's task that will help her apply what has been said in Parts I and II. Field applications and problems are the tangible footpaths of education. They can never be mapped out completely, but a few may be illuminated by organizing some of the thoughts concerning them. One chapter concentrates on testing, urging the reader to reflect on the meaning and application of tests and the reasons for neglecting certain forms of tests in the primary grades. Another chapter deals with the various practices primary teachers have devised for making contact with parents. The last chapters are loosely arranged discussions of programs and problems, and are included with the hope that their content may prove of some value to the new teacher in anticipating the demands of her profession and to the more experienced teacher who wishes to evaluate her progress.

Testing

The tests and measurements that educators use are directed toward the single purpose of discovering the best possible ways to help the individual pupil. In spite of its simplicity, this purpose is seldom accomplished. Even with supervision, the professional teacher seldom gains the ultimate from the testing program directed toward the primary child. Overanxiety causes many teachers to react as the inexperienced cook who constantly opens the oven to check on the progress of the cake, hence making the cake fail; yet the lack of success is usually attributed to poor ingredients or a malfunctioning oven.

There is too much at stake in children for the primary teacher to fumble her way through a test program and come out with erroneous conclusions. Misconceptions should not occur if the school personnel take care to understand the purposes for which they test students. Teachers do not need to have advanced training in the complex aspects and statistical bases of test construction, it is true. But as long as the classroom teacher is to remain the person who administers the majority of the tests and constructs most unit tests, she should be provided with the best possible information. The sensitive primary teacher will seek knowledge about the meaning, use, and purpose of tests in the class, and certain questions will arise in her mind. What is an adequate supply of tests for primary grades? What use will the school and the child make of the tests? What are the factors that influence testing and test results? How is a good classroom unit test constructed? Teachers often find that they must fight inertia, intuition, and the ready testimonials of their colleagues

to obtain reliable information, but persistent searching can provide answers to these and other questions concerning the use of tests in the education of the individual.

The Meaning and Use of Tests

Everyone dealing directly with children, parents as well as teachers, should become familiar with the purposes and uses of tests. The primary grades offer the best opportunity for beginning such a program, even though the more complete standard testing is done at the upper grade levels. Since both parents are more likely to be closely connected with the school program at the primary period, testing the child in kindergarten will also help the parents understand basic assumptions and conceptions of the educational program.

Our schools test pupils in order to gain a more objective view of the daily and yearly estimations which must be made concerning both the group and the individual. Objective interpretation will be less restrained if the following points are reflected upon and made matters of concern both at school and at home.

The tests used in the primary grades should have the sole purpose of adjustment or change in the individual. Tests should provide meaningful information that may be interpreted by both teacher and parents concerning each child's ability, capacity, aptitude, need, and conduct. *Ability* refers to the knowledge and acts which have already been acquired along specified lines. *Capacity* is an estimation of the child's range under the specific test conditions. *Aptitude* means the eagerness and readiness with which he increases his knowledge and adjustment under the conditions of training. *Needs* refer to those attainments that the school, through its curriculum, sets as its level of acquisition. *Conduct* comprises the interacting behavioral features of the child's interests, emotions, feelings, habits, and attitudes. If the school and the parents desire evidence in these five areas, careful selection and construction of tests must be made. In the discussion of an adequate supply of tests that follows, each of these five divisions will be represented.

Tests should aid in the identification of extreme deviates. Special instruction of different methods may be needed to bring about adjustment or changes in these cases. The teacher may give such children special instruction or individual attention, although this alone

may not satisfy the need. The teacher should consider various methods and techniques of presenting the material for the greatest possible success.

The child can be appraised more reliably if the tests given in the primary grades are well selected. The selection and frequency are still influenced by the question of whether the tests should be regarded as a sign, a sample, or a true measurement of the characteristic named. Whichever reason teachers accept, they must be able to defend the factual and logical grounds for their belief. Many tests are built to supply information for sign purposes only, and others for sampling; we should not think that every test gives a true and factual measurement of a specific area or capacity.

When a standard test is used, the teacher should be sure that she understands the design of the test. The description of the test in the manual gives the opinions and purposes of the test designer. Teachers and administrators should become acquainted with the *Mental Measurements Yearbook*, edited by Oscar Kresen Buros, from which they may obtain a review and evaluation of published tests.

In addition to using a test for the wrong purposes, there are other common errors. Often a test administrator will fail to follow standard testing procedure or will have insufficient understanding of random and systematic errors in tests. Random errors result from crudeness of the testing instruments and momentary shifts in the pupil's attention and effort while taking tests. Systematic errors result from direct or indirect coaching or unrecognized sensory defects which may lead to misunderstanding of instruction and marked differences in environmental background. Teachers who vary the procedure of giving a test may cause systematic errors to creep in. Carelessness or extreme modification of the directions given may invalidate the test results.

Discovering each child's ability, capacity, conduct, aptitude, and needs should tell us how well we are doing and which areas in the program are weak. Tests in the primary school are tools for measuring the special areas identified by the test designers. The reliability of the tool depends upon both the test construction and the test conditions. To use a test for any purpose other than the one for which it was designed will cloud the resulting picture.

We need not be disturbed about testing in the primary grades if we constantly use the tools as prescribed and only interpret them

under the test conditions and limitations. We should form the habit of always referring to a score as a specific test rating. For example, when thinking of a grade level as derived from a standard test, we should refer to it as a "test grade level." Other scores would be communicated as "test intelligence," "test readiness," "test aptitude score," or "test maturity level." This practice would help counteract the tendency to believe that all tests are measures of fixed characteristics, and would prevent misconceptions as we pass "test scores" on to parents. The teacher of the young child has a responsibility that later grade teachers do not have, for parents make their first contact with the educational system through the kindergarten and the primary teacher; therefore, it is essential that she have an adequate knowledge of the school's testing program. The profession would do well to encourage more course work in the area of test interpretation and test construction for primary teachers. Furthermore, school systems should plan workshops which concentrate on the selection and application of an adequate testing program.

An Adequate Supply of Tests

Because of his lack of reading ability and other experience, the primary child is unable to take many of the available tests. Yet, in spite of the reading limitation, numbers of tests have been devised for measuring identifiable behavior in young children. Assuming that an adequate testing program attempts to obtain a "standard test score" on the child's aptitudes, ability, capacity, conduct, and needs, we find that there are many choices of instruments available to test these five areas. Schools should decide which tests suit their program needs and select those with the highest reliability, validity, and practicality. Some tests may need to be given only to individuals, others to small groups of 6 to 10 children, while still others may be given with administrative aid to a complete class. School systems and departments are increasing their staffs with trained testers, while school psychologists and state and local school clinics are offering services that will approach the individual problem with the care that each case needs.

An adequate testing program at the primary level may include different testing techniques involving inventories, scales, ratings, projections, and episodic sampling. The major concern of teachers

is having sufficient reliable tests that can be used to *guide* the child, not *pigeonhole* him as sometimes happens with a minimum testing program. Even though with the young child tests are probably not overly reliable, the same can be said of subjective personal reaction to the pupil. Teachers should compare their estimation of the child with the test estimation. Where wide differences occur, the test and the conditions under which it was taken should be re-examined along with the personal judgment. New evidence may be needed before definitive conclusions can be drawn.

The following discussion enlarges on the five areas that may be tested, and the lists of sources in Appendix 5A, grouped together according to area, will give the reader an idea of the selection available.

Ability Tests

Ability tests have gone under many names, among them achievement batteries, readiness tests, maturity tests, and diagnostic tests. Many of these terms are misleading when we set about to develop objective terminology. In general, ability tests are designed to estimate how much knowledge has already been attained in a given field by the person being tested. The primary teacher is interested in the knowledge that a child brings to class as well as the information on a field or unit that she will teach. Along with standard forms of ability tests, teachers should construct pretests for children to take before the study of each unit. The child's ability and knowledge as measured by the tests may be used to individualize instruction and encourage children to go further or deeper into what they knew before the unit study.

It is to be remembered that the results of any ability test are a *test score* only and do not serve as an accurate picture of what the pupil knows or doesn't know in either the general or specific field. Ability tests are analytical in depth; only a few offer enough items in each subtest to estimate a pupil's full ability reliably. Therefore, the teacher must not rely too heavily on their results or be alarmed by great gains or losses in retests.

Capacity Tests

The inclusion of this type of test in the testing program is necessary in order to determine the range of potential in individuals and

classes. Education has reached a point where in some communities special attention is given to the upper and lower ranges in specific areas. Individual and class potential differences may be located with these capacity tests, and whenever possible and financially feasible all children should be given individual capacity tests. The individual test, of course, is less likely to lead to overgeneralization than group tests.

All group capacity test instructions ought to caution users that the group form is less reliable with young than with older children. The results often give rise to a serious underestimation of intelligence not only with the dull but also with the emotionally disturbed, discouraged, and sensitive child.

Aptitude Tests

Tests that are designed to predict success in a given field in advance of the actual trial or school learning experiences are called aptitude tests. We have very few of these tests at the primary level. Readiness tests in the area of reading are used more often than are any other type. Because of the scarcity of this type of test, the practitioner is prone to use capacity, ability, and interest tests as measures upon which to predict.

Conduct Tests

This form of test is given to the child or the group to analyze behavior in relation to acceptance in school. Sociometric tests have attained wide popularity in this area. Many detailed methods for securing data through sociometric tests are currently being developed. Long-term studies will need to be made before we can discover the constancy, if any, of children's status due to social group experiences.

Need Tests

Society has not specified all the basic knowledge and behavior that primary children should become acquainted with, and therefore the schools must rely on teacher-made tests in the area of needs. One school will treat some knowledge and behavior forms in an impressional manner, while others will expect the child to become skilled in the acts, and the different need tests will be determined accordingly.

Interest is being directed at present toward listening, creative, interpretative-understanding, and other definite behavior tests that are fundamental to school achievement. This may result in some form of standard measurement tool to test children's needs. However, much work will have to be done so that these tools will not overlap with tests measuring comprehension ability or other related behavior. In the meantime, teachers must construct their own tests to make an objective estimation of the material and content the child brings to school learning situations. At the end of this chapter is a teacher-made pretest showing how it is possible to sample before instruction.

Overview Tests

Some senior authors of basic content textbooks are including overview tests in the supplementary material presented with the text assignments. An overview test serves, as does a pretest, to locate concepts, misconceptions, and already acquired skills or knowledge. Inventory and overview tests are brief, easily handled in classroom or small group situations, and readily understood by pupils. They give the teacher some idea of the child's prior learning and may even pinpoint specific areas for concentrated study. The pattern that many teachers follow is to give survey tests at the beginning of the school year, unit overview tests at the beginning of each unit, and diagnostic tests at the completion of each content unit. A typical overview test in arithmetic contains questions and exercises like the following.

Directions. For this arithmetic work I am going to read some exercises and questions. You are to do what the exercise suggests or, if it is a question, write only the answer for the question. You are to number your answers as we go.

1. Write with figures the number that comes just after 39.
2. Write with figures the number 305.
3. Write the number that is five 10s and one 1.
4. Write the number that is two 10s more than 80.
5. Write a number that has the figure 4 in the 10s place (41, 42, etc.).
6. Draw a line about as long as your little finger. Under the first line draw another line that is about a fourth as long as the first.
7. Draw another line that is about as long as your little finger. Under that line draw another that is about half as long as the first one.
8. There were 8 books on a table, and 6 more books are to be put on the table. How many books will then be on the table?

9. There were 13 pages in a story. Mary has read 6 of the pages. How many more pages has she to read?
10. Sue has 12 chairs to carry out of the room. She takes 2 chairs at a trip. How many trips does she need to take all the chairs?
11. John's mother put 3 sandwiches in each lunch box. There were 4 lunch boxes. How many sandwiches did she put in the boxes?
12. Henry had 8 cookies. He ate one-half of them. How many did he have left?¹

Test Construction

Establishing the position of a child or a group in relation to the material covered or to be covered is an important part of any learning situations. Pupils can learn from testing as well as from other school tasks. The degree to which a test adds to the learning experience is determined by its structure and the use made of it. Where standard tests are available, the school will profit by using them, but there are still many tests which teachers must construct for their classes.

Due to the many operational acts necessary for taking tests the primary child is at a disadvantage with many of our present forms of tests. Because of this deficiency, the primary teacher must be more imaginative and versatile in her test construction. She will need to modify existing test techniques as well as develop new ones. Many different techniques are available for use; analyzing them with the idea of modification or new types in mind will give the teacher a starting point for test construction.

Primary grades make great use of matching, alternate-response, free-response, and completion tests. These four types can be used in written form or orally, though the teacher should remind herself that oral tests are generally less conducive to accurate estimation than written. A bit of individuality on the part of primary teachers and a concern for more appropriate test techniques with the less sophisticated child will result in better tests. Each teacher should tackle the problems and discuss them with her colleagues.

Due to the amount of material in primary grades which is given foundational treatment, test techniques emphasizing vocabulary are very applicable. *Matching tests* use such a technique. These consist of two columns, the items in one of which are to be matched

¹ The arithmetic questions have been adapted from Herbert F. Spitzer, Jessie Osborn, and Adeline Riefling, *Exploring Arithmetic*, Webster, 1958.

with corresponding items in the other. The first-grade child is daily matching pictures with pictures or words with pictures to demonstrate knowledge of many subjects. This technique is reasonably free from guessing and is economical of time and space, and the directions need not be complicated. The teacher who uses this matching test item should increase the number of choice selections in one column over the corresponding column in order to encourage more items for selection.

The *alternate-response* test technique uses a statement, written or oral, to which a correct response (either *yes* or *no* or other appropriate alternatives) must be made. This type of test has only a two-choice opportunity. It is easy to construct even in the primary grades, but it is obviously open to guessing. Many commercial work books and spelling books contain this type of test, and because it is easy to check and construct it is always present in the classroom. Many primary teachers use the oral form when discussing content with students. Because of the high relative chance factor of guessing, even kindergarten teachers must limit the oral use of alternate-response questions. The most glaring disadvantage of this type of test question is the impression it leaves on the child's mind; so often young children believe something is *black* or *white* or *yes* or *no* rather than *gray* or *maybe* because we constantly stimulate this type of response. Extending the choice to include *perhaps* at least introduces an area for discussion.

Increasing the alternate responses to three or more possibilities makes the test one of *multiple choice*, a form that is more adaptable to varying make-ups. It may consist of direct questions followed by three or more statements, one of which is definitely the best answer; or it may be an incomplete statement with a choice of words or phrases for its completion. The difficulty of this form lies in making all the selections plausible. Too often the alternate choices are obvious and enable the testee to guess on a superficial basis.

The *free-response* form of test is used in the primary grades more as an oral technique than a written one because of the young child's limitations in writing ability. It is a simple direct question with a blank or time allowed for the child's response. The question may demand a particular response or a personal interpretation. Pictures are generally used if the young are given the test in written form. The formation of the question is the crucial factor; for example, the

teacher should avoid giving clues such as *a* or *an* immediately preceding the response blank or time.

The items of a *completion test* consist of sentences or paragraphs with key words missing which the reader is instructed to supply. Completion items are longer than free-response items and require a complete sentence or thought for comprehension. This type of exercise is adaptable to almost any area and is relatively easy to prepare. There is one danger to avoid—using textbook sentences or quotes to form the stem sentences or paragraphs, which stresses memory learning.

These four test forms lend themselves to varying modifications. The success of each type depends on the frequency with which it is used and the quality of stimulus statements or questions given. A good test avoids rote learning, stereotyped language, exact textbook duplication, and catch phrases. The tests that only give spotty estimates by asking the *how*, *when*, *where*, and *why* questions are limited. It is time administrators and teachers in the field listened to the cries of leaders in the measurement field who discourage rote memory learning until understanding and purpose have been established. Careful construction of classroom tests is one corrective step than can be taken to improve learning experiences.

Through exploration and research, we must reach down to the child who lacks test experiences and develop new approaches for measuring ability, aptitude, and needs. Perhaps, the simple solution of designing ability and need tests in the form of continuous stories will bring the tests within the understanding of the young. Most tests have few related test questions, while the story test has items that measure different facts or ideas in a field through a connecting narrative. A sample shortened form of the story technique used as a pretest is given in Appendix 5B for your inspection and possible exploration.

Teachers will also need to expand the use of pretests. All too often we decide to teach a unit or concept without determining first the information and ideas that the individual and class already hold about the material. The past always colors the new and determines the effect of what is presented; hence, pretests are essential to cut down on superfluous instruction. The use of these tests, whether the teacher makes them or adopts the text preview form, should give direction to the follow-up study. When children understand that

when they are taking pretests they are in fact collecting their own ideas on a subject, they will see the need for further study and often better perceive the purpose of general systematic instruction.

The Schoolchild's Use of Tests

The foregoing discussion emphasized the fact that the purpose of every test should be determined before the actual test is selected. The child should also know why most tests are given. Capacity tests, because of the nature and inexactness of the results, need not be explained to the young child; but ability, aptitude, conduct, and needs tests will have meaning for the child if he is given reasons for them.

Schools will make many uses of the tests given to the child. Among the questions that can be answered by the tests generally chosen for providing information and measurement are the following:

1. What are the strengths and weaknesses in the curriculum fields?
2. Is the instruction, according to areas, effective?
3. How many of the group are obtaining a sufficient amount of the material presented?
4. Which children need special attention or varying methods?
5. Does the general curriculum pattern need reorganization?

The child, of course, makes less complicated use of the tests. Unless he is precocious, his principal aim is to determine how well he is doing in an area. Quite often he overestimates his ability in this simple interpretation, and the teacher must then inform him that tests are only samples or signs and that they only convey "test scores." Unless the child learns early that tests are not to be used to make permanent judgments but rather only as another way of finding out what one knows or needs to know, the true meaning of tests is lost. Improvement is the goal of testing, and children must see the need for improvement and be able to identify it when it occurs.

Allowing children to appraise themselves before beginning a study in a specific area may give direction to the study. The level that each child would like to achieve may throw light on the way he reacts to the instruction. The teacher may obtain this appraisal by asking each child to determine, prior to each test, how well he believes he will perform on the test according to some scale like *poor*,

fair, good, or very good. When the test is examined later, further inquiry may prove valuable if the predetermined level of achievement is widely separated from the actual test results.

The child's idea of what he does on tests and his knowledge of the need for tests definitely contribute to making the evaluation program objective and goal-orientated. Both the school and the child should use many tests for weighing the outcome of instruction. If the child is given the time to discuss each test he has taken, he will see how even tests are learning devices often as exciting as educational games. However, when the information from some evaluation instruments such as a sociogram, anecdotal jotting, or similar observation shows a high degree of fluctuation, neither the purpose nor the meaning of the test should be discussed with the immature child.

The school should make use of test results only within the limits of the testing and evaluation instrument. These limitations are sometimes forgotten, which can harm relationships with parents and other special groups. A common example of overextending the purpose of measuring instruments is found in our comparing readiness test scores with those of a capacity test showing mental age. Many tests cannot be compared. It is to the benefit of the child, the parent, and the school if each test is used at the maximum level, but it is far more dangerous to extend a test than to underrate it.

Factors Influencing Tests

There are always factors that influence the outcome of any test, oral or written. Recognition of such factors will help teachers in their test interpretation and the resulting individual instruction. The primary teacher who is sure that she knows as much as possible about the child's auditory ability, visual perception, speech development, and motor development will be able to eliminate many of the obstacles that can affect learning and test experiences. Some tests depend on only two or three of these personal factors, but the knowledge of all is essential for a satisfactory estimate of the child's performance.

Language comprehension and facility, like social status, may influence test outcomes. Yet the prime factor influencing the test given the young child is his understanding of its purpose and uses. When we give the primary child over 4 or 5 years numbers of tests

without clearly stating the purpose, he may develop an anxiety toward tests that will make later test situations emotional episodes. Much can be done for upper-grade learning if primary instructors make sure that everyone involved in a test understands what is going on.

American schools do not travel the road taken by many European schools where tests are used as a means of cutting off types of learning opportunities. Our aim is rather to discover the best possible means of giving all our children a good education. In the light of this goal, we should pursue the course of developing better objective tests and a better understanding of the purpose of each test type, of limiting the test to what its designers intended, and of making each test a learning device as well as an instrument for predicting. The primary teacher who realizes the importance of her personal knowledge about tests—and takes steps to make that knowledge as broad as possible—will deserve the title of master teacher.

Summary

Little use of the term *evaluation* has been made in the foregoing material, although not because it is an insignificant part of the teaching-learning process. The use of the term to some teachers is synonymous with measurement, but in the primary grades especially, it may mean the discussion period used as a technique for learning in many teaching units. When the use of *evaluation* involves goals of education and changes in behavior, it has the same meaning that it has in connection with tests and measurement.

A testing program that produces and measures changes is a dynamic part of instruction. Primary teachers are on the ground floor in the systematic school testing program, and for that reason they should be thoroughly acquainted with the structure and purpose of the tests used throughout the entire elementary school. Administrators will need to instruct new teachers each year in the over-all testing program.

Good work in succeeding grades is dependent on what is learned and measured in earlier grades. A good primary testing program will tell the intermediate grades how much a pupil knows about areas that the tests cover and how he stands in the school group and the national group. If the child sees the reason for using the

"yardsticks" of standardized tests, subject tests (reading, arithmetic, language), and unit pretests, he will bring more interest to his work. Children who are encouraged to prejudge themselves before taking the more complete types of tests (ability form) should be learning a lesson in individual responsibility that will bear fruit in further educational growth.

It appears that of all types of testing and measuring, teachers and administrators alike understand and use the pretest the least. Yet by using the pretest technique, the teacher can clarify the material to be included in the unit, pinpoint items in which there is confusion or lack of knowledge, and avoid wasting valuable school time or pupil attention by dwelling on material which is already fixed, while at the same time she gives a survey of the material that the children have had in the past or are currently learning. Since it can be one of the most effective and valuable tools of the whole testing program an example of a teacher constructed pretest is given below with the hope that it will stimulate discussion concerning its use.

This is, of course, only one of the ways in which testing and measuring tools appear in actual learning situations. Wise is the teacher who explores the area for other tests and uses them effectively; wise also is the administrator who encourages such activity in his classrooms.

Teacher-Constructed Pretest

UNIT TOPIC: Thanksgiving

LEVEL: Second or Third Grade

The teacher has planned to spend four or five daily periods of approximately 40 minutes on the topic of Thanksgiving prior to the holiday. She realizes that at this age the child has some knowledge concerning the topic. In this short time the teacher would like to direct the unit into a review of the history and the meaning of Thanksgiving. Along with this review of specific historical facts, the unit will encourage students to discover classic American themes in the holiday observance, responsibilities of the head of government at this time, and current ideas on the holiday.

The teacher has arranged the following pictures and words on cards.

- Card 1. Picture of Plymouth Rock
- Card 2. Picture of Indians
- Card 3. Picture of Pilgrims
- Card 4. The words *compound word*
- Card 5. Picture of the President of the United States

- Card 6. Picture of a turkey
- Card 7. The word *Thursday*
- Card 8. Picture of a commercial Thanksgiving parade
- Card 9. Picture of a horse-drawn sleigh
- Card 10. Picture of a Thanksgiving basket for the needy
- Card 11. Picture of a family gathered around a Thanksgiving dinner table
- Card 12. Picture of pumpkin and mince pies
- Card 13. Picture of cranberries
- Card 14. Picture of a calendar showing the months November and December with Thanksgiving Thursday, the following Friday, and December 25 circled
- Card 15. Picture of a football game
- Card 16. Picture of the President of the United States delivering a message
- Card 17. Picture of a cornucopia
- Card 18. The word *proclamation*
- Card 19. Picture of Sarah Hale
- Card 20. Picture of Abraham Lincoln

The teacher requests the pupils to separate themselves into pairs. She tells them that she will pass around pictures which she wishes them to look at and discuss together. Each picture, she tells them, has something to do with Thanksgiving, and she asks each person to discuss with his partner the connection he feels the picture has with Thanksgiving and then write a brief note or statement about each card.

After sufficient time has been given for the class to look at the pictures, discuss them, and jot down ideas, the teacher asks the children to vote on the cards they are reasonably certain have a relationship in picture or word to Thanksgiving. After the tally is made those cards that the children found to bear little relationship to Thanksgiving will be identified.

The following class periods will then be directed toward developing an understanding of the concepts on those cards which the children chose as showing a relationship to Thanksgiving.

Reporting to Parents

A performer in a variety show holds the audience's attention by juggling plates, balls, flaming sticks, and knives. Educators appear to be losing attention by juggling methods of reporting pupils' progress to parents. In the last decade schools have developed, modified, and discarded innumerable detailed evaluation report forms, among them scales, check lists, percentage marks, letter marks, symbols of satisfactory-unsatisfactory (S-U), informal letters, parent-teacher conferences, cumulative records, and student self-evaluations. Whatever the type of report made to parents, there appears to be unrest among the members of the profession, signifying that our juggling has not yet supplied us with a wholly satisfactory means of reporting.

What is the best form of reporting the progress of children to their parents? Is there a general pattern that all primary schools can follow? Is an effective report card also practical? Should every child receive the same type of report? What are the obligations of the school and the home toward pupil and class progress reports? These and hundreds of related questions constitute the perplexing problem which the profession must attempt to solve.

Types of Reports

There is good reason to say that the development of the American grade card and reporting system has been one of revolution, not evolution, and that no uniformity exists between communities and, quite often, within school systems and grades. In general, reporting prac-

tices in this country have followed a circuit from informal oral communication through more standardized written evaluations and back to the personal approach, oral and written.

Informal Personal Reports

The teachers in the dame schools or early grammar schools generally recorded at the end of the year one of two words, *passed* or *failed*, in the school records along with the pupil's attendance, and discussed the child's progress with the parents at church, social, or community functions that both attended. In those days, according to the autobiographies of teachers, the teacher was held in high social esteem and parents were rather more than less inclined to believe the teacher knew what her job was.

Percentage Marking

The main subject areas such as reading, arithmetic, rhetoric, and writing were evaluated in a percentage score based on 100 points as a perfect grade. Learning was measured by whether the student reproduced the assigned lesson almost perfectly.

Letter or Number Marks

The symbols A, B, C, D, F or 1, 2, 3, 4, 0 represented a certain range of percentage score which the teacher arrived at by averaging daily marks or by using an over-all judgment. Also added in this report card was the number of days absent from school and a mark for behavior or conduct. A five-point scale was accepted by most because it was believed to be impossible to make hairline discriminations. Parents seemed to understand this rating scale. A few schools modified this five-letter or -number system to a word description—*superior*, *good*, *average*, *fair*, and *poor*.

At this stage in reporting practices, the report card also began to include a space for the teacher to add a sentence or two describing the effort and personality of the child. Some of the cards carried a brief note to the parents instructing them to sign and return the report card promptly to insure that the child gave the report to his parents. Cartoonists still find humor in the reluctant children who employ all means of approach in the attempt to have fathers sign the report without reading it. Modification of this type of reporting can probably be traced to teachers who believe that this form of

marking causes a great deal of emotional stress at home. Critics seem always to list certain limitations in any discussion of this type of report. They are (1) the probability of unsatisfactory competitive comparison by parents and children, (2) the temptation to use marking as a device to coerce children into doing better work, (3) the effect of overt behavior upon the marks, (4) the possibility of developing undesirable attitudes such as superiority complexes, selfish pride, or snobbery in children who receive high grades, and (5) the danger that the child will resort to undesirable means of securing information by lying or cheating in order to achieve high marks.

It is noteworthy that the same limitations are also being suggested at parent-teacher conferences. A child who only gets S's and U's on his report has the human weakness which prompts him to count the number of S's and brag about them to his peers. In similar manner do the other criticisms of the former type of reporting apply.

REDUCTION OF THE NUMBER OF MARKS

Letters quite commonly used in such a system are *P* and *F*, representing *passing* and *failing*, or *S* and *U*, representing *satisfactory* and *unsatisfactory*. Reducing the number of marks was believed to have the advantage of making marks less important, thereby lessening the likelihood of the child's becoming discouraged. Some schools added the letter *H* for honors in an attempt to re-establish the stimulus to more effort. Other schools used a positive and negative symbol system. Along with this reduction of marks came a long list of character and behavior traits about which the child received checks. Words such as *citizenship* replaced *deportment* and traits such as *fair play*, *cooperation*, *aggressiveness*, *shyness*, *lack of humor*, *courtesy*, *self-control*, and *responsibility* became watchwords.

Marking on a Curve

Some schools attempted to use a reporting system based upon the normal distribution, claiming its validity on the assumption that intellectual ability and attainment are distributed among groups of 20 to 40 individuals in a form that closely approximates the normal distribution. Classroom teachers did not adhere to this assumption, and the use of a normal distribution as a base for marking did not receive wholehearted acceptance in many schools.

Reporting by Informal Letters

The other path that the American reporting system followed during this period of change was the informal descriptive and diagnostic letter. The letter report was praised by its advocates for its directness, informality, and stress on the development of the whole child. The letters usually fell into one of three categories: (1) those written entirely by the teacher or principal giving a description of achievement and behavior, (2) those written by the pupil and supplemented by a postscript from the teacher, and (3) those written primarily as a group project in which the group summarized the directions and accomplishments of the class.

School systems using the letter report system made extensive suggestions the teacher could follow when writing the letters including: (1) write concerning specific acts, attitudes, and accomplishments which you and the school commend in the child's behavior; (2) give the attendance record and tardiness data; (3) suggest some activities in which the child needs improvement; (4) finish the letter by describing a successful activity or satisfactory habit, skill, or attitude that the child has achieved; (5) suggest causes for failures and success and give method of improvement; (6) include health data. The general premise was that the letter was to be a flexible form of reporting and the teacher was to use only those suggestions she felt she needed.

Teachers found that composing such a letter was more of a chore than any other type of report to date, and in most schools where it is used the letter form has been supplemented with conferences and a final subject-list report form. The most beneficial form to come out of the written report is one which should have more general use than it does at present: the informal letter written by the class as a group, which attempts to summarize the areas covered and sometimes to evaluate the semester's or year's work. Teachers in the primary grades who, with the pupils, evaluate what they have done and what needs yet to be done will discover that the group review helps everyone involved—herself, the pupils, and the parents—keep the goals of the school program in mind.

The letter form of reporting provided a limited two-way communication and also made it possible for teachers to attach a postscript inviting parents to come to school to express their thoughts

and feelings and to discuss their child's progress. The following example of an informal letter report will reveal to the reader that this form might become stereotyped and overly time-consuming if the teacher has a class of 20 to 40 pupils.

Dear Dr. and Mrs. Russell,

Dana works well and plays well. He is a spirited child. His captivating smile, his eagerness, and his ability to cooperate and play fair make him a well-liked individual in the group. His personal qualities enable him to be an important member of the group and we miss him during his absences.

At first Dana was a bit shy and restrained when speaking to the group. Now he volunteers many "why and how" questions that stimulate discussion.

Dana's progress in his academic work has been tremendous. He has always put forth effort and persisted even in the presence of failure. The readiness program has now taken effect. If he had his way, Dana would like to read and do arithmetic all day long. He is extremely reluctant to put his work away when periods are over.

All of this eagerness to finish a task has produced some mediocre qualities in his writing, drawing, and art work. However, we feel that Dana will learn to relax and take things in a more leisurely manner as he develops.

Dana has definite preferences in choosing the children with whom he would like to work, build, and play. His choice of activities is influenced by these friends. He feels secure in the group, both with the children and with the adults surrounding him. He respects authority and is quick to utilize suggestions.

Although Dana is very neat about his person, he is a *real* boy, and he plays hard, works hard, laughs hard, and is having fun in our group.

Dana has been absent five days during this eight-week period but his general health aside from one minor cold appears to be very normal.

Dana's teacher,
Davene Allen

The class letter report might be similar to the one below. Consider the merits of this general group letter to parents as a summary and critical analysis of work accomplished in a given school period.

Dear Parents,

Our class has had eight weeks of school. Along with work in learning to write letters and words, reading, and other units we have had activities with art materials and music.

The writing we have been doing these eight weeks is the formation of the small letters. At the end of this class letter you will find a sample of my writing. Perhaps you would like to keep this handwriting sample and

compare it with my writing in the next period. Our class has been learning the difference between cursive writing, manuscript, and print. Some of us still use the word *print* when we mean *manuscript*. We didn't know there could be so many different kinds of writing. Do you know all of the different kinds?

Our reading has been from many books and the blackboard. Some of us are working in different books. Most of us have learned to read the names of the children in our class. We are working on words that sound alike, such as *Ann* and *pan*. The teacher writes lots of words on the board and we read them.

Our special studies have been about homes. We learned that there is a difference between a house and a home. Many children live in many different houses. A family is what makes a house a home.

Our music teacher has taught us many songs. One that all of us like very much is called "Pat-a-pan." We sing it every day.

Our teacher says we have been exposed to lots of things but she isn't sure they all took. She says it's like measles. Some of us get it and some don't. She had us put this in the letter.

We will be having a parents' program two weeks from Friday. Please save that date.

The First Grade

The major disadvantage in the use of the individual letter, and to a slight degree in the group letter, is the amount of time needed to write thoughtfully and accurately. The teacher usually must begin two or three weeks before the end of the reporting period or she will find herself burning the midnight oil, a practice that often results in hurried and inferior reporting.

The Direct Conference

The last stage in the development of reporting systems in American schools has been encouraged by the primary teacher. Because of her training, the teacher of 4-, 5-, and 6-year-olds stresses direct personal contact with parents as the most satisfactory means of making reports on her pupils. This method is rapidly growing in popularity and has found many forms in which to clothe itself. Parent-teacher conferences have gone through as many modifications as has the so-called traditional report card.

Conferences where teachers and parents must meet face to face bring a personalizing touch into education and are believed to make parents aware of the community aspects of the school and the individual interest the personnel take in each child. In many ways the conference report approach is trying to recapture the informal

contact that the teacher had in the days of the dame school with the parents of her charges. Some school systems have organized parent-teacher conferences to the point where they could be described as a well-ordered, formalized, informal meeting of two persons. The use of contradictory terms in the description emphasizes the ambiguous character these conferences often have.

The conferences fall into four types: the get-acquainted conference, the problem conference, the reward conference, and the "have to have" conference.

The get-acquainted conference is held on a very informal plane. Often it resembles a chat between two persons—two, because fathers seldom attend conferences after kindergarten and first-grade level; a study of the real, not the good, reasons for their absence after that point might reverse the pattern. The teacher uses this type of meeting to draw out the parents and become acquainted with family aspirations. She seeks information on how the parents react to the child—whether they are apologetic, ashamed, proud, or genuinely accept the child for what he is. This type of conference, which is often held three to four weeks after first acquaintance with the child, is referred to as a rapport session. Cooperative working arrangements are sought, and the outcome of this conference quite often sets the tone of the work with the child.

Basic information on such subjects as health, family background, number of brothers and sisters, the child's interests, number of playmates, and hobbies can be of value in handling the child. Some teachers in addition seek pertinent information about the parents such as educational level, occupation, interests, and length of time in the community.

Another type of conference is the problem conference, which takes place after a get-acquainted exchange. The reason for a meeting of this kind may be the teacher's feelings about the child's work in certain subject areas, personality problems, recognition of special talent, the need for challenges in certain areas, or any definite subject in which tangible material may be presented to the parents for mutual consideration. This type of discussion may include the pupil in order to give him confidence and guidance. In using the problem conference the teacher is encouraged to state the reason and then allow the parents to describe their viewpoint. Because a complete picture of the problem is desired, the confer-

ence must not be a one-sided report. In the ideal, the problem conference is a team concept. Its general purpose is to direct both parents and teacher in recognizing and understanding the child's needs, and then in thinking out a plan of action together that should result in the desired effect.

Some parents have the mistaken idea that all meetings are called as the result of a problem. The third type of conference is, in reality, requested from quite the opposite standpoint: to reward both parents and pupil for either a specific or general achievement. Administrators feel that this type of get-together has the indirect value of effective public relations since it gives both pupil and parents a boost in morale.

The final type, the "have to have" conference, is scheduled because school systems feel that three or four discussions should be held with parents during the year. Teachers have nothing specific or new to present and parents fail to see the need for the conference. It can result in a friendly talk, but unless the teacher has objectives in mind and tangible material or episodes to verify or direct the conversation, the parents may come away suspecting that all types of conferences are unproductive.

SOME CONFERENCE PRACTICES

In each of the four types of conferences there are some problems and possibilities which the teacher and administrator should consider beforehand in order to guarantee maximum success.

Some parents are afraid to meet teachers. The parent quite often believes that a teacher or school stands as a higher authority and is therefore in the position of an expert or judge. Parents should be made to see the teacher as person, not as a judge. On the opposite side of the coin, some teachers are afraid to meet parents, or, perhaps certain parents, even after years of using the conference method of reporting. Administrators should recognize this and give backing by a personal appearance or sympathetic and understanding remarks during a coffee break.

Letters to the home prior to a get-acquainted or problem conference may help set the stage for a meaningful discussion. The teacher might suggest questions for parents to think about and discuss at the conference, for instance: How does your child use his after-school time? Are there any health difficulties which might in-

terfere with progress? Do specific or small things seem to irritate or anger your child unduly? Does your child talk spontaneously about school experiences? Teachers must assume that parents, until proven otherwise, are eager for their children to do well. The family is an educational agency as important as the school, and parents can offer valid and helpful suggestions and criticisms.

The physical arrangement of the conference room may have some effect on the meeting. Because most schools do not have special rooms for such meetings, teachers often talk to the parents in the classroom. This has the advantage of showing the work that is going on at the time of the conference. The key to the physical set-up is to make the parent at home in the room; this may best be done by arranging to sit down at a reading table or in a lounge corner. Suitable chairs may be brought into the classroom from the teacher's lounge or the administrator's office.

The beginning of any conference is the biggest hurdle. A teacher should think as a hostess and show genuine friendliness to the parent. By being natural and gracious and never rushing even though she may be behind in her conference schedule, the teacher works toward a successful and productive relationship with parents.

An essential part of all types of conferences is to allow parents to contribute their share of the discussion; and, of course, the teacher should avoid long monologues that sound like lectures. Should parents be reluctant or slow with questions, the teacher may ask for opinions on a certain project to be undertaken or a comparison of the school today with those the parent attended. On the other hand, the teacher must keep control of the conference. Any lengthy digression, such as discussion of other children, neighbors, father relationships, or other extraneous topics, should be ruled out graciously by the teacher.

At the end of the conference, the teacher might summarize the most important points that have been made, and perhaps suggest that parents pass certain points on to other family members. She should then close the conference with a polite, friendly phrase: "I know you are busy and I appreciate your giving this time," or "We'll have to consider this point later" is better than "Our time is up." Making plans for future conferences is a practical note on which to end the meeting.

SOME CONFERENCE PROBLEMS

Even though the conference method of reporting pupil progress has gained favor and acceptance particularly in the primary grades, it still presents some problems. Teachers should consider the negative side of this type of report in order to obtain better results.

A recognized difficulty is evasiveness. Parents as well as teachers, when faced with a problem, sometimes refuse to approach it with honesty. A question like "Is my boy really dull?" is often understandably met with an evasive answer, but the only excuse for the practice is in the case of a ridiculous question.

Teachers sometimes allow professional language to smother the conference. Parents may feel that the teacher who speaks in this manner is trying to show superiority, and in general they are right, for there is a plain, intelligible way to make any statement which does not depend on another language. It is best to leave jabberwocky to Alice's adventures in Wonderland.

Some parents are overtly emotional, and come to a conference keyed to a pitch that may result in crying or shouting. Teachers should remember to maintain dignity but not to prejudice an emotional reaction without first seeking its cause.

Marital difficulties are sometimes the subject or cause of a conference. Strict confidence is required of the teacher; no mention of private parental affairs should escape the conference room, or the teacher may find herself in the position of a confessor concerning a child-family problem. In spite of an earnest desire to help, teachers are not trained to attempt to solve such problems, and it is best for them to keep hands off difficulties which are rooted in deep-seated emotional factors, home health programs, and marital difficulties.

Certain situations arise in conferences which are embarrassing to the teacher. Statements concerning last year's teacher, comments about the administrator, gossip, and the like must be handled carefully by the conference participants. Adverse criticism, hearsay, and sarcasm have no place in a professional teacher-parent conference.

Without doubt, the problems involved in the conference method of reporting to parents are as many and varied as are the disadvantages and limitations attributed to the various other forms of reports. Also, the parent-teacher conference can be burdensome if

the administration requires the teachers to fill out forms in duplicate to file in a pupil's folder. School personnel should therefore remain alert to other ways of contacting parents.

Supplementary reports are sometimes given with two or more personal conferences. These supplementary reports, which we will discuss in detail below, have taken the form of the common card listing subjects and conduct. In the kindergarten some schools have modified written reports with picture writing and idea writing, which makes it possible for the young child to understand what is being reported to parents.

The Purposes of the Report

Some form of report system is found in almost all schools. Primary grades have moved away from having the teachers make weekly or monthly personal contacts as a result of multiple difficulties, and scheduled conferences have gained acceptance. In the evolution—or revolution—of types of reporting, the American primary school has enlarged its educational objectives, and these goals should be readily identifiable in whatever the report method in use.

Effective reporting is sometimes made impossible because schools do not adhere to what they believe their objectives to be. Today's primary grades are interested in the social development of the child along with his intellectual achievement and his understanding of the health program. Too often these goals cannot be recognized in the confused outline of areas that is given to parents.

Some written reports place the section on the social adjustment of the child ahead of content without realizing that parents may not see its value without guidance. Some report cards include material that directs the parents' attention to points outside the reporting objectives. An example of this regrettable practice is the common use of the card as a public relations and adult education device, with statements like the following printed on one side: "Children get along better in school when parents and teachers work together"; "Encourage the reading of good books on your child's reading level"; "The value of this card depends upon the interest shown in it by the parents." These platitudes may be very true, but they do not reflect the major purpose of a report form, which is to define as accurately as possible the individual child's position in school.

Analysis of the pros and cons of various types of reports will never be amiss. However, changing report forms can fall into the category of calling a rose by another name, so that the reasons for change should be carefully examined. As well, national trends in reporting should be watched.

A few schools have decided that education, including the reporting system, is best when it is individualized. With this concept, some pupils will receive three or four conferences, and others perhaps none because of the lack of need. A few children may be given standardized cards and others informal letters. Administrators who have adopted such an individualized approach will need to be ready to explain why Donna had one conference and why Billy didn't receive any.

The statements made concerning today's needs in reporting to parents may hold the key to a more effective method. Through action research or controlled experiments, it should be possible to develop a report form that will be practical, effective, and meaningful. A glance at the following list of purposes in reporting to parents today will show that the primary goal, that of furnishing an accurate picture of the child's progress in school situations, has given way to sundry others. This list has been paraphrased from many written statements found in texts, journals, and report forms.

1. Reporting systems should serve the purpose of personalizing education and communicating the assurance to parents that their children are being treated as individuals.
2. A report should show the child's social development, emotional growth, and intellectual achievement.
3. It should satisfy the aim of promoting constructive parent-child relationships.
4. Reports may show the progress of the entire class along with individual achievement.
5. An effective reporting system should help the child develop wholesome attitudes toward himself and his work, and should make the child feel secure.
6. It should also create a desire on the pupil's part to make any improvements needed.
7. The report should give the parents information on the school's philosophy and goals.

It may be observed from these points that the reporting system is expected to accomplish purposes that are beyond the limits of concise written or spoken communications. The real reason for so many modifications of so-called traditional reports probably lies in the commonly held belief that parents and children have been misusing reports; many statements have been made to the effect that schools must take the competition out of reports, play down the level of achievement desired by parent or pupil, and place social adjustment on the same plane as intellectual achievement. And as a result reporting systems that attempt to inform parents on all phases on their children's progress are given the stamp of approval and set up as patterns to follow.

The key to the success of the venture lies in the accuracy with which we report, whether by letter, verbally, or with standardized printed forms. Modifications that do not make the teacher responsible for accuracy in her reports and which communicate items which she is not trained to measure are harmful. If simple height and weight measures on written reports do not jibe with those the pediatrician has made, it serves to lessen the validity of the rest of the report. Many teachers are asked to be sociologists and psychologists and determine whether the child is aggressive, an isolate, or emotionally disturbed. A teacher may well sense the cause of misbehavior, but she is not qualified to judge accurately either the symptoms or the causes of a child's psychological state.

The evils that are apparent in all reporting systems are difficult to avoid with even the most sincere and careful efforts. In view of this, schools may consider ways of improving reporting by first limiting its scope. A letter from the administrator may do a better job of public relations than a form designed to include this function. After establishing the aims of the reporting system, the school should turn its efforts to obtaining accuracy. The report will be more significant to parents if they understand that the marks and statements are based on the teacher's judgment. Whenever the report is based only on standardized tests, these results should be given separately and in comparison with classroom achievement.

The primary school will generally use various forms to report the progress of pupils. The 4- and 5-year-old level will unquestionably use the parent-teacher conference as the dominant method. Parents of young children are more cooperative about taking the time for

visitation, and, as we said, fathers remain active in the picture for the first few years. First- and second-grade teachers may use both parent-teacher conferences and informal letters or cards. In the upper-primary grades, because of the curriculum and activities, a standard form of written report supplemented by problem and reward conferences may be most suitable. Examples of report forms for kindergarten through the third grade, incorporating some of the suggestions and practices discussed in these pages, will be found at the end of the chapter.

Whatever the pattern of pupil reporting in the primary school, the success of the system should be gauged by periodic checking. Adequate sampling techniques should be put in operation to determine at reasonable periods just what parents, pupils, and teachers feel the home reporting forms are achieving. Listening to the few parents who complain or making changes to satisfy vociferous teachers is not a sensible way to develop an effective report system.

The Composition of the Report

In any learning situation, there are four possible levels of aspiration for the child, and an accurate report may show as many of these interpretations as possible: the parent, or parents, have their collective or individual judgment; the teacher has hers; the child has his, although he is not likely to express it openly; and there are standardized test levels. Why should a report not reflect to the parents a comparison of the teacher's concept, a standardized test report if it is adaptable to the scale system in use, and the child's judgment of his own attainment? If these were arranged to show discrepancies, parents might receive a more accurate report of the child's progress.

Standard or textbook tests offer reliable reports on achievement in a specific area. The Iowa Every Pupil Profile chart provides a form and comparison base on which teachers and pupils can superimpose their judgments, and a statement from the parents concerning their expectations would give an over-all picture. Where we can accurately report individual achievement in relation to the class or to a normal standard distribution, we should do so. But whenever we commit ourselves to subjective judgment, we should identify it as such in our report form rather than leave it to assumed understanding.

When we feel that we must make statements about abilities and achievements in social relations, critical thinking, appreciation of worthwhile activities, and physical development, such observations must be made as carefully and with as many measuring tools behind our remarks as possible to strengthen the accuracy of the statements. If a standard report form to parents is used in the primary school, it must have accuracy as its first criterion. This is a task that the young in the profession may accomplish by diligently studying the effects of the past and by understanding the purpose and the limitations of the report.

There is ample evidence that school personnel are continually examining the reporting system with the idea of improvement. Self-evaluation by pupils is being used more and more frequently as a means of reflecting judgment and making realistic comparisons. Many multiple forms are being used by primary teachers (conference cards, for example) in order to insure effective reporting.

Home Visitation

Sometimes reporting to parents of primary-school children has been confused with home visitation and getting to know the parents. There is no doubt that social environment has an influential effect on the development and behavior of children, and analyzing it will aid in understanding the child. A report to parents is not, however, a tool for evaluating the home. Children behave under school conditions in certain unique ways, and the evaluation and interpretation of these reactions, adjustments, modifications, and achievements should comprise the core of the material discussed with or written to parents.

Home visitation serves a different purpose in the education of the young. The proper pattern is for the teacher to be invited into the home by the parents. The American home is the family's private domain, and it is the family's prerogative to extend an invitation only to those persons they desire. This view may seem contrary to opinions expressed by others, but caution must be exercised in judging individuals in their home. Personal tastes and values are such subtle factors that the visitor can never really be certain that a painting hanging in the living room has not colored his judgments

of the child as well as of the family. Home visitation is a delicate procedure; and, like parent-teacher conferences where the teacher is the hostess who controls the meeting, so must the parent have the privilege of being the hostess who controls the home visit.

Discussion of a general nature among adults can be pursued over dinner, dessert, or tea; such invitations bring the teacher into the home on occasions for which the family has had time to prepare and thus can put its best foot forward, just as the teacher has had time to prepare for her conference. In this connection it is well to remember that *social* relationships occur in the home and *professional* relationships take place in the school.

Supplementary Reports

Reporting the progress of pupils is only one of the many types of reports that primary teachers can make. There are three other valuable forms that each teacher and administrator will find reason to use: anecdotal reports, cumulative records, and "state of affairs" reports.

Anecdotal Reports

Anecdotal record keeping consists of sample jottings that describe a specific observation. These records are kept to verify an idea or to check incidents that may shed light on the root of a child's behavior. For instance, a second-grade teacher has a child who seems touchy about her personal desk belongings. The child gives evidence that others are mishandling her material. Sample checks should be made of the contentions over a period of time and brief notes made to record the facts observed. In three or four days it can be ascertained whether others do mishandle the property on the child's desk as they pass it, and the situation may then be discussed with the child. These short notes, kept with a time record and a short description of field conditions, will aid teachers when they bring problems to administrators, parents, and the children involved.

Anecdotal recording should be done systematically, or inaccuracy and personal bias may affect the teacher's judgment. There are innumerable occasions when the primary teacher will need to make brief jottings about an individual or the group to be certain of

developing her feelings and interpretations logically. The teacher might keep a pad and pencil on the desk or in a pocket for this purpose.

Cumulative Records

Because of the mobility of American families, schools throughout every state need to keep some form of cumulative record on a child from his first day in class. These records follow the child when he transfers schools. They are equally useful if he stays in one school system; administrators need specific information on each child for state and federal aid purposes and a multitude of other demands.

The typical cumulative record file is a folder that contains printed sheets for the recording of general information about the child, parental information, comments, observations, and recommendations by teachers with a space for dates, referral statements, achievement and intelligence test scores, scholarship records, and attendance data. But often space does not permit the teacher to keep the most pertinent information concerning capacity test records—the conditions under which the test was given (the number of adults supervising, the number of children taking the test, and the time of the day the test was given, and so forth).

As valuable as cumulative records are to succeeding teachers and administrators, they have some limitations. Some teachers have jokingly called them "crime files." This brings into focus the danger of making a permanent record of events, episodes, or behavior that will not have meaning as the child passes through the grades. Some teachers feel that they must make some comment on each child simply because space is provided for it. Yet common sense and a sincere regard for the individual rule that only pertinent events should be noted down. A child may "sin" at the first-grade level by being a bully or snatching a candy bar, but there is no need to have a record of the behavior unless it is part of a pattern discovered through accurate sampling. Cumulative records should be checked once every three or four years for the purpose of wiping the slate clean and eliminating any statements that could color a reader's judgment erroneously. Many primary children are nail biters at the primary level, and this information may be important at this particular phase of development; but a written record of the trait that

follows through public school is not necessary and may even prove harmful.

"State of Affairs" Reports

Frequently the most obvious means of reporting to parents is overlooked. "State of affairs" is a term applied for want of a better to those reports teachers send home or make to parents through (1) products the child makes, (2) class letters, (3) planned parent parties, and (4) PTA meetings.

There is not a primary child who, at least once a week, does not take home a paper, drawing, project, or lesson that portrays to the home the activities going on at school. Teachers in the primary grades have done a commendable job in seeing that children have tangible material to present to parents. Concrete articles like lesson sheets, drawings, and Mother's Day gifts give the child definite proof to present his parents that school is action, and will communicate more effectively than many forms of contact between parents and teachers. Two problems arise in using these items for home reporting, however. First, they sometimes do not in themselves explain adequately the purpose for which they were done. To avoid misunderstanding, the primary teacher might send home a simple group letter explaining the purpose of the product. The second problem concerns their overuse. Children often do not see the reason for taking home something that mother or father may not understand (as he has learned from previous experience); furthermore, the child himself may not see the worth of the project. Many a lawn or street on the way home is strewn with papers and lesson sheets that never reach their proper destination. The practice of sending home completed workbooks without a useful description of their meaning and the time spent on them should be watched by teachers.

A class letter that summarizes or collects the material the class and teacher are embarking on makes a worthy report to parents. Quite often in reading, charts are made of class experiences; these charts may be mimeographed and sent home to parents so that they may see what was accomplished. The sample home bulletin below illustrates how a teacher kept parents informed on an area of study and suggested ways they might help the child's work.

SAMPLE HOME BULLETIN

Dear Parents,

What do you know about Mother Goose? This question and many others similar to it should be asked by your child soon as during the next two weeks we will begin a unit on Mother Goose.

Any information that you can help your child discover concerning the home's favorite Mother Goose rhymes will motivate the study. Perhaps you know some Father Goose tales or have visited the grave of Mother Goose in Boston. Whatever you know about this topic may be just what your child will ask you for as he progresses with the study. Our plans call for the children to learn various types of Mother Goose material: rhymes, stories, songs, tales, tongue twisters, lullabies, and counting jingles.

We wish to make an exhibit of all the Mother Goose books that we can find. If you have any in the home which you would permit your child to bring to school, we would be most appreciative.

Thank you,

Mary Brown, your child's teacher

The young child likes nothing better than to have his parents come visit him at school, and nothing pleases parents so much as seeing the child perform in a group situation. School programs for parents have been an effective means of reporting ever since the box social was used as a technique for gathering the clan. A well-planned parents' program has its place in the reporting program. When children are to have visitors, they should be given direction and helped to plan so that they will know some pathways to follow. The young child may be confused at having his parents around him in his schoolroom unless some attention is given to how to behave during these experiences. Elaborate instruction need not be drilled into the young, but the teacher should discuss with the children the elements of meeting and treating their guests. The get-together may be an informal tea, a party for mothers, a special demonstration for fathers, or a review of projects that fits into parents' schedules. Having children plan the event, make the decorations, write the invitations, and in general organize the occasion are valuable activities. The younger the children, the less complicated the affair, but it should receive no less preplanning and understanding on the part of both the pupils and the teacher.

Primary and elementary teachers have always had the PTA as a monthly evening event for meeting with parents. Upper-grade teachers have games, dances, and plays. All teachers must cooperate in some organized attempt to bring the community together; Ameri-

can schools are a fundamental component of the community. Parent-Teacher-Association meetings are designed to foster mutually respected and profitable relationships. To serve reporting programs best, primary grades should not only sponsor meetings and open-house affairs but should also be allowed to keep the primary-grade classrooms open on meeting nights so that parents who desire may see them. Placing the pupils' work on bulletin boards and having the children leave personal notes on their desks for their parents to read will pay dividends in home relations. Making files of each child's work available or allowing parents to peruse the child's books will encourage them to ask questions and, by asking, discover that schools are designed for learning.

Summary

In each of these report programs there is the unavoidable question of frequency. How many periods for card reports? How many parents' programs? The "how many" questions probably can never be defined by a pattern. The number of times that any method should be used can only be decided by answering the question: "How many times will it take to accomplish the purpose or purposes?"

Any report technique and relationship with pupils' families should bring parents, schools, and children together on a commonly understood plane. Unity of education is accomplished not by feeling about for it or by desiring it, but by reflective planning and by investigating to see that things are progressing the way they were designed.

School personnel who use a well-planned reporting system, an occasional telephone call, informal letters, class reports, cumulative records, school newspapers, and other tools available are making an honest attempt to keep the school a community project. The school tasks will best be defined by reporting systems that are understood by parents and pupils and yet are not overly time-consuming for the teacher. Maintaining accuracy as the motto for all reporting will eliminate the vagueness for which reporting systems are often criticized.

Problems of school time and space for conferences, secretarial help for cumulative record keeping, the competitive aspect of marks, standard comparisons of pupils, and parents' backgrounds

and contributions are a number of incidental areas for professional reflection. Their solution can be worked out at the local level and should never cloud the essential issue: that schools must report to parents the progress of the children enrolled.

If the term *marks* is to be replaced by *evaluation*, which entails appraising the child's intellectual, physical, emotional, and social levels, we will need more tools. For teachers to evaluate all these aspects successfully, they will need training in sociology, psychology, medicine, and other broad subjects. We must determine whether we can afford the time, money, and effort for this special preparation.

*Kindergarten and First-Grade Report **

Report of Progress for:

Marking Key

V = Very good

G = Good

N = Need for improvement

(Picture of a child
at a table cutting)

(Picture of a child
obviously follow-
ing a teacher's
direction)

(Picture of a child
playing alone)

I work whole-
heartedly.

I obey cheerfully.

I play whole-
heartedly.

(Picture of a child
at a table with
a teacher)

(Picture of children
listening to a
reader)

(Picture of children
playing a game
together)

I follow directions.

I listen to stories.

I play and work
with others.

(Picture of words
for copy writing)

(Picture of ABCs)

(Picture of a cat and
the words *cat*,
pussy, *kitten*,
kitty, *tomcat*)

* Schools desiring to use this report form may supply the necessary pictures in the frame where there is picture description.

Kindergarten and First-Grade Report

I learn to write.

1 = one
1 2 3 4 5

I learn the ABCs.

(Picture of a child
reading)

I learn new words.

(Picture of a child
telling a story to
others)

I learn numbers.

(Picture of a child
singing)

I look at books.

(Picture of a child
listening to
records)

I tell stories.

(Picture of a child
waving good-bye)

I sing whole-
heartedly.

(Picture of scissors,
paste, hammer,
crayons, and
pencils)

I listen to records.

(Picture of a child
touching his toes)

I learn gestures.

(Picture of a child
holding his hand
to his ear; picture
of a bear and a
pear)

I use many tools.

(Picture of one child
helping another
put his boots on)

I exercise my body.

(Picture of a child
laughing)

I listen to words
that sound alike.

I try to be polite.

I laugh and smile.

Attendance

Days attended:

Days absent:

School:

Parent:

Composite Report Form for Second and Third Grades

Name:

School:

Reading	Language	Vocabulary	Arithmetic	Science	Social Contacts	Music	Art Activities	Operational Acts	
Picture reading	Alphabetical reading	Word attack	Oral facility	Word meaning	Auditory reception	Spelling	Range and size	Attitude toward	Counting
				Process and system	Meaning and use	Observing	Thinking	Experimenting	Interests
					Field reading	Seeks primary source material	Listening	Participation	Dance
							Texture	Form	Color
								Coloring	Pasting
									Cutting
									100
High									
									75
Above average									
									50
Below average									
									25
Low									

The marks in *red* are the teacher's judgments of the child.

The marks in *blue* are those obtained from standardized tests given.

The marks in *black* are the child's own level of expectation.

Days attended:

Signature:

Days absent:

Assessments and Community Relations

Tom Sawyer tried on various occasions to get a particular program in motion. In spite of every ingenious plan the great American boy could muster—from feigning drowning to a sore toe—he did not always accomplish his goal. Tom's failures often resulted because he forgot to assess the entire scene fully. Ineffectual teaching and sometimes failure also result when the educational field is underestimated or incompletely assessed.

Field application provides the testing ground for beliefs, theories, and programs. Success in the field is closely akin to Tom's adventures in life. Unless every field problem is considered, each possible application assessed, and the stage carefully set, all the best-laid plans of women and men go astray. The preceding chapters have discussed various patterns that may be or are being practiced in guiding the learning experiences of the young child. The mere introduction of these patterns into a program produces problems that involve the very core of the teaching art.

The field problems that present themselves for solution may be met with various attacks, but there are a few general points that should always be held in mind: (1) face each problem and issue squarely; (2) attempt to solve the problem even though the action may be only temporary; (3) evaluate both class and school programs yearly; (4) insure that each person involved in the school program has a meaningful account of the aims and means of the curriculum; and (5) divorce personal and personality problems from curriculum issues.

The first field issue is the teacher: acquiring and keeping the best type, defining and assessing the educational tasks, and providing the

material and atmosphere for a satisfying and successful career. The second group of field problems cluster around the family and the primary environment that affects the child and school. The third set consists of the approaches used in making the school, home, and community relate as a continuous force in the growth of the child. The fourth, but not the least important, are the efforts that are spent in putting the curriculum in action.

Such an array of problems calls for clarity of perspective on the part of both the administrator and the teachers.

The Teacher

The first problem facing a school system every year is, of course, the provision of the best teacher at every level, for the competent teacher is the heart of the school.

The ideal primary teacher needs no more of anything than does the ideal secondary teacher—no, not even more patience or love of children. These two oft-cited qualities for primary teachers are as necessary for teaching the adolescent as for all other students. And the teacher who becomes a wife must have an abundance of love and patience for that male individual whom she has chosen as a partner.

A teacher can acquire a reputation of being ideal if certain measures, within her control, are met. These are simple measures that help make successful and happy teaching days.

1. The teacher should be confident of her ability, which means that she must feel adequate in relation to her training, her material, and the applications of both.
2. She must be respectful of her vocation. She must be realistic in attempting to identify the numerous needs and errors in the profession, but she must also be convinced that improvement comes with programs, ideas, and insight from its participants.
3. She must first set up a personal ideal which she desires to meet, taking into consideration other persons' concepts of the ideal learning situations in classrooms.
4. She must strive to be a specialist. The time has come to talk of teachers not as chaperones, moralists, preachers, or reformers but as individuals who have devoted time, energy, and mental effort to specializing in an area for instruction.

5. She must win status with her fellow teachers, pupils, and teaching community.
6. She must continue to broaden her interests even though she teaches the very young child. Professional competence is partly accounted for by being generally cultured and is enhanced by social graces. Wide reading is the most effective method yet devised by man to become well rounded.
7. Whenever possible, she should live in the community in which she teaches. She must become a responsible citizen, a home owner if possible, a contributor, and a leader.
8. She must attempt to break down any stereotyped ideas about teachers held by pupils and communities by being an intelligent, civilized individual.

Training Requirements

If teachers could have some way of previewing the practices and activities involved in their teaching assignments, a more relaxed—and relieved—introduction to each school year might result. The check list in Appendix 6A is an example of a tool that might possibly eradicate confusion for new teachers in a system and also provide a guide for the administration in the additions and deletions for a basic yearly plan—as well as a personal guide of strengths and weaknesses to the practicing teacher.

Teaching in the primary grades is a challenging task and no less important or rewarding than teaching on any other level, be it secondary or college. To be a successful teacher one must have the knowledge, or the drive to find the knowledge, that makes life for others worth living—today, tomorrow, and forever. At first glance the activity-judgment list in Appendix 6A may appear overwhelming, but it will give the reader an over-all view of what will be required of her before she enters the engrossing task of teaching.

The Family Background

A part of the teacher's field problem has been faced when she takes stock of her personal tasks. Next the child must be viewed. The problems clustering around the family background, the child's experiences, his physical characteristics, and the level of the parents and the child's aspirations must be assessed systematically. In this en-

deavor it is possible to become slightly obsessed with forms. There are many reasons to avoid filling out great numbers of forms, not the least being the obvious fact that the form in itself is of no value to anyone; only when the information requested on it is really pertinent to the school's relation with the child is it justified. Wise administrators usually keep such forms at a minimum and assure that they deal only with essential data.

In the area of parental relations the school must be sure at all times that the home's privacy is not being invaded. In these days when much is said about cause and effect without careful exploration or observation, the school must not begin the primary child's school experience with inaccurate or inapplicable data sought from parents. In the family information blank shown in Appendix 6B, schools may find suggestions to help them make up or evaluate their own forms.

A few of the questions asked on such a questionnaire are delicate and might seem indiscreet. This would be so if the information were misused or interpreted falsely. Knowing the legal status of parents, for instance, is necessary for school personnel involved with the child. Sometimes a parent who does not have legal authority over a child will enter the school's domain and attempt to take control of the child, and the school must be in a position to protect not only the child and the rightful guardian but itself as well. Knowing the number of individuals, including grandparents, relatives, or others, who make their home with the child gives an important clue to the number of social contacts the child has had in preschool years.

Any and all information that the school requests must be secured with the idea that it will be used to make the home-school relationship closer. Case-study situations may be given to parents which explain the place of such data. No parent will object to answering pertinent questions, but some will want to know why the school needs to ask them.

Knowledge of the child's home life may be as valuable as observation of his school life, but whenever the school needs to know if the child's surroundings contribute properly to his health and welfare it should proceed through government and community agencies. Unfortunately, the home that fails to provide minimum life essentials usually does not recognize its deficiencies.

Pupil Assessment

The Children's Experience Inventory form is the latest tool being explored in schools. These questionnaire-type instruments provide a check list with which parents may catalogue the experiences they have given the child that will dovetail with school activities in such areas as reading, and counting, music, theater, religious background, play, travel and visiting, movies, health, and social responsibilities. Learning is the fusion of old experiences with new, and the teacher and parents who give a little reflection to what has been provided for the child in his home can direct him into neglected as well as related experiences at school.

In examining the sample experience inventory in Appendix 6C, the reader should consider each question carefully, weighing the general uses of such forms and, more specifically, which items appear to be strong and which weak from the standpoint of the primary school. An experience inventory may have more merit than a questionnaire seeking information on home ownership, occupational status, education of parents, leisure-time interests of parents, and family financial status.

PHYSICAL ASPECTS

It is essential to have a physical picture of the child as he enters his public school adventure. Like the example in Appendix 6D, such forms should give both the home and the school an accurate portrayal of the child's physical condition.

Occasionally a school, to obtain information on health habits, will ask questions that intrude on the privacy of the home by implying that certain types of behavior come under the school's authority. Here are some typical examples: (1) How often does the child take an over-all bath? (2) Has your child learned to cover his nose and mouth with a handkerchief when he sneezes or coughs? (3) Will your child carry a clean tissue or handkerchief to school each day? (4) Can your child use the bathroom independently and in a sanitary manner? (5) Does your child wash his hands thoroughly with soap and water after toileting? (6) Does your child keep his hands away from his mouth, ears, nose, and eyes? (7) Does your child go to bed at a regular hour? (8) Does your child brush his teeth after eating?

Whether to include such questions is open to discussion, and teachers, school officials, and parents may want to discuss the pros and cons.

EXCEPTIONAL TRAITS

When the school makes the first contact with parents, an important point to consider is the unique and special characteristics of the child. A way must be found to encourage parents to communicate any unusual or marked traits they feel their child has. Every child is different from every other child, and we should discover and identify what makes the difference. The obvious departures from the norm—speech defects, physical handicaps, aggressive or submissive traits, and brightness or dullness—have been the subject of research and enlightened teachers' efforts for many years. Time should be taken to identify the less obvious traits, such as a keen sense of sympathy, slight deafness, emotional sensitivity, and talents in the arts, social relations, mechanics, and vocabulary. Every child should be given the feeling that he is exceptional in a way that is worthy of human dignity. American parents spent years claiming that their children were average. We have lived long enough with the belief that there are the common people and the uncommon people. Each parent should be given the opportunity at the time of his child's entrance into school to insure that his child will be recognized in his own unique personality, and this recognition should be used to herald the first school experience.

The use of a simple form like the one in Appendix 6E with short, precise directions should begin a new era in the primary school—all we need to do is place in the folder with the child's physical record, his home background, and his experience inventory the information on what makes him different from the run-of-the-mill, average lassie or laddie.

The School and the Community

Some field problems lie squarely in the realm of the school's relations with the community. Problems dealing with parent contacts, roundup programs, and school transfers unavoidably absorb a great deal of time and energy. The manner in which they are handled is of the utmost importance.

Contact with Parents

The mobility of both teachers and families today makes the contacts between schools and parents more difficult than in the period of the small or one-room school. Hence the professional person must take advantage of the opportunities for contacting parents and create new opportunities for direct relationships.

Some writers encourage teachers to make home visits, have small meetings with groups of parents, and invite parents to school. Parents as much as teachers must look for occasions that will serve as good points of contact. There is no reason for parents to stop the once common habit of inviting their children's teachers to the home for dessert or a spot of tea. This friendly gesture can do more than planned home visits on the part of the teacher. Quite often home visits, as was hinted at in the previous chapter, are interpreted by parents as simply a respectable method of snooping. Too much is at stake for the school to take the initiative for all personal contacts. This matter would be a valuable item for PTA discussion.

Primary teachers may easily schedule late morning and afternoon playground periods every month or so and invite parents to come by for a chat as they watch the group at play. Through these informal contacts with parents they may develop a special kind of rapport. Visiting during classroom and outdoor play periods encourages many parents to consider the problems as well as the rewards of primary education.

Happily, primary teachers have been quite successful in organizing pleasurable classroom programs for parents. The rural school-teacher especially has developed excellent parent-teacher-pupil contacts. We would be wise to examine these relationships before this type of school leaves our educational scene. A good teacher will not only succeed in the classroom but will in addition weld a community together and make each parent burst his buttons in pride over his child's accomplishments. Using such teachers as models, we might be able to analyze their success so that the contributory elements might be understood and passed on to others.

MAINTAINING CONTACT

The best means of maintaining contact with the home is through the various forms of written communication. Impersonal as many

believe written communication to be in character, this is not necessarily true; writing is an accomplishment of a civilized society, and the communication can be as personal as the writer desires. Even a standard form can carry a personalized postscript.

Primary teachers can maintain the all-important link with the home through friendly letters, monthly newsletters, and notes as well as through the written reports to parents on their child's progress that were discussed in Chapter 9. Parents desire and need to know what is going on at school, as we have said. The friendly letters sent home may contain information about the various units on which the class is working. Relaying such messages tells parents that you have a definite program in view and keeps them alert to the possible materials and experiences outside school that can fit into the study.

Monthly newsletters containing tidbits about particular events and children is also valuable. They generally include correspondence from several classes, if not from all primary grades. Simple announcements of whose pictures are hanging in the hall and future plans about a program are typical items which find their way into the newsletter. This form of communication is similar to a village or neighborhood newssheet.

The short note the child carries home from the teacher may contain, among other items, pertinent disease warnings or information on lost-and-found articles. This type of correspondence may be directed to an individual or to parents as a group.

There is one problem in connection with these avenues of communication that is often neglected: the means of transportation. Young children sometimes lose notes or newsletters or forget about them until mothers find them in the washing machine in pulp form. To get messages to the parents intact, the teacher can take two positive steps. First, she may read the communication to the group. Then she may discuss the information and the person to whom the letter is to be delivered with the class just before the dismissal time. Second, because pinning notes to children's clothing after kindergarten is degrading according to their standards, the teacher might plan a class project of making a wrist note holder. Commercial wrist purses are available, but children can easily construct their own from cloth, plastic, or leatherette. Class-made wrist bands can be named anything from "mail pouchettes" to "arm saddle bags."

LOSS OF CONTACT

The positive side is always the pleasant one on which to look. Unfortunately, all field problems contain as many pitfalls as elements of hope. For example, the avenue of the home's relationship with the school is traveled more heavily at the primary level than at the upper-grade levels. Both parents join in parent-teacher groups, parent meetings, and informal contacts more readily while their children are young. As the child progresses through school, we first lose contact with a great share of the fathers and, finally, in the upper grades, both parents. The possible reasons for this pattern of interaction are manifold. The one reason that is seldom mentioned and almost never faced is the possible fault we may find in ourselves as professionals. Could it be that fathers tend to drop out during the later primary years because we have made the contacts too feminine? Might our programs have been designed unconsciously for lecturing rather than discussing? Might much that we do really be unimportant and unrevealing so that parents tend to forget contacts when possible?

Here is a list of communications that schools and school-parent organizations have presented to the home. Do they really communicate suggestions and information, or are they actually directives in the guise of other types of statements?

It is urgently recommended that medical, dental, and similar appointments be made for after-school hours.

. . . it is best to consult your child's teacher before attempting to help him directly with reading instruction.

Young children need large tools as their muscular coordination is not sufficiently developed to use small pencils and narrowly ruled paper.

Parents should supply the child with a few really good books rather than many poor ones.

Every child has a desire for communication. Listen to him patiently to encourage him and help him grow in conversational power.

Give your child well-balanced but appetizing meals. Discourage candy eating between meals.

See that your child has enough rest and sleep. The following are general recommendations.

4-8 years of age—12 to 13 hours

9-12 years of age—11½ hours

Never criticize the school or teacher in front of the child.

Respect his property—even the most battered toy.

Use the soothing words of *please, thank you, and pardon me* at every possible opportunity yourself.

Your child needs to know how to listen and follow directions.

Your child needs to know how to go to the toilet by himself, flush it, wash his hands, and return without playing in the water.

Help your child by seeing that he wears simple comfortable playclothes at school. See that he can dress himself, button his own coat, and tie his own shoes.

Your child should put things away in orderly fashion.

Can your child walk up and down stairs alone?

Can your child talk in easy sentences, and express his needs and wants with no baby talk?

These statements and questions have been lifted from newsletters, brochures, and parents' guides which have been written by various American school administrators though they are not, of course, a fair sampling of the many necessary items of information that schools communicate. However, they do demonstrate how easy it is to tread too heavily. Many of these quotations show our professional class status symbols, and others are entirely out of the dominion of our professional authority; some carry knowledge, albeit in a lecturing tone, important to all. Which are which? Which are necessary, and which out of bounds? These are the questions that make the implementing of primary education a never-ending process. Unless we constantly check on what we are doing in the field, it is all too possible to misdirect our efforts.

Spring Roundups

The before-school roundup has gone by various titles—preschool roundup, spring census, primary orientation. Whatever it is called, the program will usually have certain familiar features.

In the spring, when the present kindergarten class is adjusted to the school, the class and teacher invite small groups of the following year's pupils with their parents to attend an afternoon get-acquainted gathering. If the guest list is too large for the teacher to be able to handle and still remain a good hostess to each parent and child, she will need administrative help. Quite often refreshments made by the pupils are served, and the new children will be introduced to the various play materials. School administrators will take the opportunity to acquaint the parents with the forms and information

necessary for school enrollment. This includes registering birth certificates and other legal papers, if any.

Outdoor programs have proved to be the least difficult to handle. The expanse of space seems to take the edge off the reserve some preschoolers display.

This type of orientation program should not be thought of only in connection with future kindergarten children; it has merit for other primary grades. First graders may invite the kindergarten class to explore the room and facilities that they will use the following year.

Parents can be invited to aid in these roundup programs. Two mothers from the present group and two mothers from the incoming group acting as cohostesses will help immeasurably in making the rest of the parents a part of school experiences.

When fall comes around and the new classes of pupils come to school, individual problems of adjustment crop up. These problems can be solved with less strain if certain precautions are taken.

1. Be sure to have some adult responsible for late registrations.
2. Be sure to have adequate help circulating from room to room to help teachers with on-the-spot problems.
3. Encourage parents *not* to remain with their children more than five minutes.
4. Have name tags to place on each child.
5. Watch all possible exits for the child who decides to "take it on the lam."
6. Have loving arms ready for the reluctant few who prefer to adjust by crying.
7. Provide a fast-moving and self-motivating schedule the first week of school. This point will be discussed later.

First days of school even at the upper-primary level take the patience of Job and the humor of Twain to see that each child is made to feel that he belongs and that all is well with the world.

Transfers

Moving from city to city, which both parents and teachers are doing with greater frequency, is causing an increasing number of transfer problems. To keep continuity in the school program, school administrators must assure that every new primary teacher has a

grounding in accepted procedures. Explaining the program briefly and then allowing the new teacher to fumble with the problems and decisions as they occur is nerve-racking. If the principal furnishes the newcomer with a check list of the different parts of the school program and facilities, he will do much to make her feel at home. Many schools have a workshop period prior to school opening which permits the transfer teacher to become acquainted with her room and the building before she is faced with the usual demands of the new year's program. Many a fever, a sore throat, and an upset stomach is avoided by this prophylactic workshop.

Children who transfer are appearing in larger numbers and raising questions which deserve more concentrated attention. Many transfers are in reality the more transient members of each community. The very structure of the school organization makes home owners and one-family dwellers the controlling element in the community. Yet the school program must be understood by the transient family as well. The stable members must take the initiative in orienting the more mobile population. Home owners and school administrators must explore both present and new procedures to help new arrivals participate in community and school affairs.

Administrators might well enlarge the activities of the Welcome Wagon programs that are in existence in many of our communities. These workers who visit new families with information and small gifts from local businesses serve the community well. Why should they not offer information about the local schools as well? Photographs comparing the schools of a quarter-century ago and today, drawings of proposed additions, brochures of the future hopes for the school system—these will give the new citizen a concentrated view of this side of community life. Any such planned approach to reach either the permanent or the transient new family will have rewards in helping the new children in school. The transfer child, who at the primary level never quite understands why he isn't more permanent, therefore needs much attention from adults.

Teachers, and particularly primary teachers as a group, should develop techniques to help the transfer pupil fit into the program more easily and quickly. The buddy system, classroom program reviews, and special privileges are worthy of consideration. The success of the buddy system lies in the choice of the class member to become the "sister" or "brother" responsible for the new student.

Some teachers find it valuable to have each child check a list of many interests and activities, marking those they enjoy the most. Then when they ask a transfer student to check the same list, they have a basis for assigning him to a child who has a great number of similar likes and interests. Many teachers find that the arrival of a transfer student presents a concrete reason for having a program review by the class. Such an activity clues the new child into past activities of the group and serves also as a learning situation for the other pupils.

Every new member of a fixed group needs empathic backing. Many young children do not show the misgivings they harbor as they adjust to the new group. Special privilege times or tasks may alleviate some of this natural fear of the unknown. After the transfer has been in the class a week or so, the teacher may designate a given time each morning when he will be given special privileges. These may consist of anything from reports of experiences elsewhere to free time for recreational browsing or reading. Giving the child the feeling that he is an individual, and well-regarded also, will make his adjustment period more pleasant.

The Curriculum

One question that parents and teachers alike are interested in is the sequence in the learning program. The mobility of the population has focused schools' attention not on organization as much as on programs. Parents want to know not how something will be handled or who will handle it but what each primary level program will have as its year's achievements. The success of all school programs will depend on the parents' knowing what the program is and feeling that the school belongs to them for the education of their children.

If the curriculum is to be unified, the primary teachers throughout the system must confer with each other and determine the year's general goals. The professional teacher, who is the keystone in American education, has the privilege of modifying the curriculum. Her modifications should be transmitted to parents and fellow teachers to insure the sequence of the program. Sequence, which we will discuss below, must not become paper commitments only; teachers and administrators should use workshop time to reach a common understanding about the overlapping areas, initial study areas, and

areas of free selection that will make up a general yearly primary program. Written curriculum guides help, but these must be given the spark of life through discussion.

Sequence and Scope

The words *sequence* and *scope* have acquired the characteristics of Tweedledum and Tweedledee in the educational world. In some writings these words function just as well standing on their heads as they do with the simple definitions given in the dictionary; in others, they are interchanged or confused with unknown quantities.

Sequence means the coming of one thing after another, the order of succession, or a connected series. In education it means that orderly progression from one grade to the next through a planned program of steps that rely upon previous experiences. Planning in sequence does not exclude the possibility that some material will need repetitive exposure; in fact, some curriculum content will be taught every year with only minor changes in type or depth of treatment.

The belief that one grade is to prepare for the following grade can only result in confusion. Each grade does prepare for the successive ones but only in that each level builds upon the foundations of past achievements. Each level is a spiral step in the cultivation the child gains through education. Also, a teacher must accept the child as he is, not from the standpoint of what she thinks he should have learned in previous years. Because a child comes to the third grade with little or no knowledge of cursive writing or reference reading is no reason to place blame on past teachers. In reality, the school curriculum will follow in sequence only when more *team teaching* is done between grade levels as well as within a grade.

An insistence on sequence will never be amiss in a school when it is taken to mean that the school personnel as a group are expected to teach content in orderly progression. But schools must lay aside their provincial belief that they can or should teach *only* what their own communities need. Because primary teachers generally remain at one school fewer years than do upper-level instructors due to marriage or family obligations, it becomes paramount for the school to establish as orderly a sequence in content from grade to grade as is possible.

Where there is more turnover among teachers than among students, the school should be very cautious about determining what

programs each teacher plans for a school year. This does not mean that administrators should require rigidity of their programs, but rather that they know what will be taught. It is a good policy also to keep an accurate picture of the rate of mobility and where it is occurring. School boards and administrators should study these areas and either attempt to change the pattern or locate teachers for these schools who can practice and explain their educational philosophies and resulting lesson plans.

Where the turnover of children is high, teachers should provide more extensive material from which to draw basal lessons. Children who move away from a school where only one textbook is used in a given area will be lost in their new school unless the accustomed text is also in use there.

Sequence is something that must be given more than lip service; orderly programs must be planned so that teachers can provide whatever experiences are needed to insure acquisition of learning.

The twin to sequence, *scope*, is the more elusive of the words. Scope is the distance the mind can reach, or the vista that can be given in an area. If either or both of these definitions were considered in every unit presented for study, the education of man would reach as yet unknown heights.

The scope of the curriculum should always take into account the capacity of the individual mind as well as that of the group. Certain individual minds always outdistance the group, and it is here that scope becomes a problem in classroom activities. The class as a group can and will reach a certain plateau, but the individual can progress to a much higher level. Taking each mind a little further is the aim of the individualization that modern civilization demands. The curriculum should have the scope to stretch the individual mind and extend the view from the mental mountaintop of the entire class.

Lesson Plans

Few adults realize that they have to push themselves to put into writing the daily, weekly, and yearly plans which they wish to accomplish. Part of this reluctance is rooted in belief in the myth that written plans, especially those that cover more than a week, produce rigidity in the classroom. This idea represents a complete misunderstanding of the purposes and uses of written plans and causes schools to lose a great deal of their teachers' efficiency. Unexpected absences, for example, leave the classroom without sequential learning.

Furthermore, the mobility of both teachers and students demands more reliance on weekly and yearly lesson plans.

If teachers would realize that merely writing down ideas and goals in no way produces rigidity, there would be some basis for analyzing where rigidity does begin. Curricula that encourage page-by-page assignments or work-sheet or work-book completion are not the product of the defenseless material that was written and published with the hope of stimulating better learning. Rigidity is caused by the teacher or administrator who fails to take both the child and the content into the picture, and it can best be combated by making sure that personnel understand the field problems which result when pupils, materials, time, and goals come together.

Approximately half of a calendar year is *not* spent in school, which leaves very little time to develop the great number of impressions, foundations, and skills to be taught at each primary level. School plans for each year, blocked out in broad segments, will aid more than hinder goal fulfillment. Writing such plans at the beginning of the year and checking at the end of the year can help the teacher make accurate judgments of how much was covered and how much was left undone. Weekly and daily plans keep the school curriculum in some sort of framework.

None of the plans need to be elaborate compositions, but they should be complete enough for a substitute teacher to follow without deciphering a code of personal shorthand.

Schedules

The primary teacher has the responsibility of scheduling the expected program. The time schedule of each class is more than a time study. It is a blueprint of goals and a reflection of philosophy. Teachers in America are constantly bombarded with the idea that, of all things, schedules should not be standard, rigid, or traditional. What relation these characteristics bear to each other, if any, is highly debatable. In any event, schedules are essential, and even the young wish to know what will come next. To understand the value of scheduling, it is perhaps important to consider schedules on a weekly rather than a daily base. Teachers will gain insight in their programs if they make a sample time study of the weekly schedule. A time study might disclose, for instance, that some subjects and activities are being overindulged at the expense of others.

A teacher should keep certain considerations in mind when she sits down to the task of determining the classroom schedule.

1. Schedules are important for substitute teachers, who must always be planned for.
2. Schedules provide continuity of program.
3. Every schedule may be changed as important experiences develop.
4. Without a schedule children will not experience the pleasure of having occasional and adventurous changes.
5. Schedules can be planned effectively by percentage approximations, for example, 30 percent of the day for physical education, 30 percent for general arts, 20 percent for language and literature, and 10 percent for general assembly and toileting. The remaining 10 percent is taken up by individual instruction.

Standardization of primary schedules may be undesirable, but flexible programs that in practice assume that direction must be based entirely on individual needs may be patterning children on fleeting here-and-now values only. The primary teacher who respects the individual and the group and realizes that content needs systematic handling will find a schedule that can be placed on paper and brought to life with her professional skill.

Suggested Schedule for Kindergarten

A.M.

8:30- 8:50 Conversation
(Roll Call)

DESCRIPTION OF ACTIVITIES

This period is designed to allow for individual contact. Children are directed to occupy themselves with the activities placed in the room or playground. As units and experiences are unfolded during the school year, review and practice material is placed about for occupation at this time. Roll call is accomplished by having (one to one) checking-in sticks. Time allowed for this period depends on size of group and number of teachers. Minimum contact time is approximately 2 contacts per minute—making a period of 12 to 15 minutes a reasonable time allotment for the average-sized class.

8:50- 9:00 Discussion,
report, or story

This period differs from conversation time because it is directed toward a topic theme or center of interest. Quite often this period is listening to reports around the selected unit or topic under study. From these reports the teacher directs discussion and organizes thoughts and plans. If no topics for discussion or reports are used, the time is entirely allotted for story reading. This period should end with a recreational story.

9:00- 9:35 Liberty play

Liberty play period is a large block of time used to develop children's awareness and ability with basic school activities. Children may even have individual check charts to keep weekly tab on the time spent in various activities. Material and equipment should be provided that permit:

Intellectual development—books, measuring cups

Manipulative and sensory development—magic slates, scissors

Miniature dress-up—house corner, dress shop

Therapeutic—clay, water, sand, mirror, soap, punching bag

Physical—hoops, jump ropes

Aesthetic—music books, pictures

9:35- 9:50 Music time

Music time is a period designed to:

1. encourage children to participate in musical experiences
2. unfold with impressional treatment the various aspects of musical content (types of songs, instruments, musical forms)

9:50-10:10 Physical
Education

Physical education is outdoor or large room activity designed so that children will have equipment and games that develop

1. strength and projection
2. flexibility and agility
3. endurance

10:10-10:20 Lunch

Light snack time for juice and crackers. During this short period the teacher can table-hop to converse with small groups of children seated at the table. Use of song fest material is encouraged.

10:20-10:30	Unit discussion	Topics and work selected from suggested list found in texts and curriculum guides.
10:30-10:45	Construction and manipulation	Manipulative and operational acts of construction, field trips, and other tasks related to the unit under study.
10:45-10:55	Relaxation	This is a period of time designed to provide experience with material and behavior that are believed or known to relax a person: (1) laughter, (2) muscular exercises (alternate pressure-release exercises), (3) rhythmic exercises (rhythmic breathing), (4) quietness, (5) effects of certain types of music, (6) psychic power of certain poetry and prose.
10:55-11:05	Story time	Story time should never be excluded from the school daily schedule. Two periods are most appropriate.
11:05-11:20	Fine arts	Fine arts period provides experience with (1) pantomime, (2) simple dramatization and puppets, (3) art appreciation and discussion, (4) dance, (5) rhetoric and choral reading, (6) awareness of nature, (7) flower and object arrangement.
11:20-11:30	Individual time	End of the kindergarten day where the group and individuals are directed to select and evaluate activities of the day, finish undone tasks, make contact where needed and talk to each other about content topic and school activities.

Suggested Schedule for Primary Level (Grades 1-2-3)

8:15- 8:30	Conversation Time. See description under kindergarten schedule.
8:30- 8:35	General assembly. Tasks of roll call, reports to office, and administrative details.
8:35- 9:00	Language Arts. Instruction in the oral, empathy, and movement aspects of communication.
9:00- 9:20	Alternate school days spent on units from different content areas. Social contacts, science, literature.
9:20- 9:30	Handwriting instruction.
9:30-10:00	Reading instruction in alphabetical writing.
10:00-10:20	Physical education. See description in kindergarten schedule.

- 10:20-10:25 Relaxation. See description in kindergarten schedule.
 10:25-10:40 Reading to children by teacher or a mature reader.
 10:40-11:00 Instruction in arithmetic concepts.
 11:00-11:35 Individual work period to follow through on assignments for various content areas.
 11:35-11:45 Liberty play and observation-participation in interest tables and special projects.
 1:00- 1:20 Language arts. Emphasis on spelling, purposes of writing, and other forms of written communication besides alphabetical writing.
 1:20- 1:50 Fine Arts. See description in kindergarten schedule.
 1:50- 2:10 Physical Education.
 2:10- 2:30 Music. See description in kindergarten schedule. One day a week may be spent in training a humming choir or whistling choir.
 2:30- 2:50 Reading instruction.
 2:50- 3:00 Fine Arts.
 3:00- 3:15 Liberty play period.

Annual "First Week"

New teachers and time-tested veterans both have precarious moments on the first day of school. What is the best way to start a school year? The answer invariably lies in the individual teacher's program. Even teachers who attempt to glean the best from the approaches of others still end up with their own personal solution. This individual touch is needed for a pleasant beginning and should be stressed by each primary teacher.

Some points may be considered, of course, that may make the first of the school year a satisfying experience for the child, the teacher, and the parents. There is no need for one to feel that they all must be adopted, for the teacher will need to formulate an approach that best suits her unique situation. Yet teachers-to-be as well as experienced teachers may wish to consider the merit of some of these suggestions.

The fundamental task before the primary teacher the initial week of school in the first year and every year thereafter is to be in the best of health and to get enough sleep to be thoroughly rested before beginning each new day. No matter how long the teacher has practiced her profession, the first week of every year should be as thrilling and as absorbing as the year before—and as exhausting! The teacher should expect unplanned-for problems, look forward to interruption, predict possible trouble, and above all develop a sense of humor that will make the frustrating moments soon forgotten.

Regardless of the grade level in the primary school it seems wise to maintain a schedule the first week. The detailed program that will follow after the group has consolidated will not, of course, be possible, but adhering to the schedule will give the children some pegs to hold on to as they adjust to the new situation.

Personal experience has taught many teachers the value of spending more time outdoors than indoors when weather permits. The 4- and 5-year-olds are usually given opportunity to toilet every thirty or forty minutes to insure against accidents from possible nervous reaction.

Some schools practice a staggered entrance; the first few days the class is divided into thirds, each attending one day alone, before the entire group is brought together. Many other staggered programs are in existence, and the imaginative primary teacher will be able to design others more or less complicated. Rural areas that depend on buses to bring the primary children seldom use staggered programs because of the cost of transportation. These teachers who take the group as a whole the first "fatal" day have produced no traumatically wounded children and wear no more or less physical and emotional scars than do urban instructors.

The length of the day in some schools is shortened and some schools halve the time spent at school the first two weeks. Here again the rural school bears up under the programs that leave the children the entire length of time and in some communities even make all-day provision for the kindergarten pupils. Any shortening of the program the first two weeks of attendance is a little like telling the parents that we can only adjust to their children in small doses. A primary teacher is in the field because of one basic factor—she likes children, even in big doses on first days. Staggered entrance programs can create more snarls than they resolve.

Some rules of thumb points to consider in the first week of school can be summed up as follows.

1. Try to have initial play activities outdoors if fenced playground space is available. Adjustment seems to be easier outdoors than in a four-walled room.
2. Follow a shortened schedule.
3. Use folk songs and well-known group songs intermittently to unify the group.
4. Read "sure-fire" recreation books. *The Three Billy Goats Gruff*,

Little Black Sambo, *Madeline*, *If I Ran a Zoo*, *Babar*, and *The Day the Cow Sneezed* are reliable stand-bys.

5. Have name tags all ready when possible for younger members of the incoming groups, and mark lockers or clothes hangers with simple identification tags. Some teachers find that the children enjoy having name tags in duplicate, one on each locker and one for the child.
6. Make personal contact with each child, and learn his nickname, if any.
7. Have your name on the blackboard or bulletin board.
8. Show the children photographs of some of the people they will learn to know as the school year progresses—the principal, other primary teachers, custodians, cooks, ground crew, and previous classes.
9. Take simple field trips to various parts of the building—the principal's office, the custodian's quarters, the nurse's room, and other classrooms.
10. Schedule toilet times more often than will be usual later.
11. Do not have too many activities for free selection. Each day different occupations may be placed out, but to make everything available on the first day tends to cause flightiness.
12. Encourage children to have something to report at home about what they learned at school the first week.
13. Provide the juice most commonly liked (probably orange) or milk (probably chocolate) the first week for lunch.
14. Encourage children to become interested in a social problem, a physical activity, and an intellectual topic the first week of school.

The first days and weeks of school can be enjoyable times of new adventures if broad programs are planned. The adult guides the child, and this guidance should be from reflection rather than on-the-spot decision.

Summary

Assessing the teacher, acquiring background information for each child, instigating field programs of roundups, transfers, procedures, and parent relations, along with problems related to the curriculum,

comprise a situation closely akin to the one Robert Burns must have had in mind when he wrote: "The best laid schemes o' mice and men / Gang aft a-gley; / An' lea'e us nought but grief and pain, / For promised joy." The harassed teacher or administrator who tries so hard and plans so much—and frequently fails—must often be tempted, like the bard, to despair of the efficacy of plans and efforts; but determination and open minds will bring the solutions needed in the future as they have in the past.

Schedules, lesson plans, pupil assessments, are all part of the pattern of primary education. When a teacher begins to appreciate the multitude of designs in which these field problems appear, then is the time that action research begins in the classroom. Haphazard education should end when thought is brought to bear upon curriculum, community, and teaching methods.

Questions and Half-Answers

In setting down any comprehensive material there comes a point when many questions are still unanswered or, perhaps, even unasked, and when the writer realizes there is no proper chapter heading under which to classify them. The title of this chapter signifies that a group of loosely connected questions have been gathered together here to be answered—half-answers are given because the majority cannot be resolved satisfactorily in the light of present-day thought or because the writer sincerely feels that education has taken a limited approach to the problems.

Most of the questions in this chapter have been asked by teachers at state and local education meetings. They have arisen during buzz sessions and informal gatherings where teachers spontaneously open their hearts to issues and problems that face them in the field. There is no suitable arrangement for these questions, but for convenience's sake they have been divided into two groups—those dealing with organizational problems and those concerned with curriculum and content issues.

The healthiness of an organism is often determined by the amount of purposeful activity in which it engages. A crying baby is healthier than one that never cries, and so it is with primary education: if the constant questioning and searching for ideas or material is any clue to its present state of health, we can honestly say that it is quite fit!

A healthy educational program is one that modifies and redirects when goals are reached. Today's educational programs contain abundant questions demanding some degree of resolution. We need not fear half-answers, for they leave the door open to further thought—

we need only fear "half-baked" answers and their resulting misdirected programs. The difference between half-truth and truth is the elusive element that makes teaching the great adventure that it is. As you read these questions and the attempts at replies, ask yourself related questions. With such personal involvement the value of this chapter may be enhanced.

Organizational Problems

What is the real value of kindergarten experience?

This is the question that makes the novice quake when parents interrogate her concerning the efforts and directions that are taken by the kindergarten curriculum. The value of anything, whether it is an education or a fur coat, is the worth to the individuals involved and the society or the group responsible for the act.

There is slight evidence that the kindergarten program as it has evolved to the present has value if judged in terms of achievement in later first-grade work, adjustment for new learning situations, and parents' acceptance of and desire for a kindergarten program. There is conflicting evidence on the advantages gained by kindergarten children in the field of arithmetic. In 1954 the Research Division of the National Education Association published a bibliography of the studies directly related to measuring the value of the kindergarten program. Close scrutiny of these references shows that in this question, as in so many problems of the humanities, statements and judgments are made on empirical data and observations. Adequate controlled studies have not yet been performed to solve the problem, and we can only accept the evidence at hand.

We could interpret the value of the kindergarten by summarizing the varied investigations made since Mary Bradford's 1912 study on retardation and the kindergarten factor. Evidence gathered in 1924 by W. L. Gard indicated that the proportion of first-grade repeaters in cities without kindergarten programs was much greater than that in cities with kindergartens. There are even some reports of evidence in favor of kindergarten-trained children in the areas of motor control, initiative, leadership, cooperation, and self-control. These studies range in dates from 1912 through 1936, and the American kindergarten has changed its goals since this period of investigation. The most recent research on the value of kindergarten education has

used first-grade achievement and readiness as the criterion.¹ Not all of this evidence can be interpreted as conclusive.

If the value of the present-day kindergarten is measured according to the aims and objectives suggested by the various writers in this area, these then must be understood and defined by each beginning primary teacher as well as those who feel they are going to teach only the kindergarten level. Students will find it helpful to read works on the subject by Neith E. Headly, Clarice Wills and William Stegeman, Helen Heffernan and Vivian Todd, Samuel Parker, and Roma Gans.² These writers direct attention to the objectives of the kindergarten program that each favors.

Yet this is only half the answer; the reader will need to compare her own goals and values with those of the writers mentioned. The final step will then be to examine those aims in the light of the child's right to become civilized and the progression, enlightenment, and organization in the child's educational life which constitute satisfaction of that right.

The value of the American kindergarten can also be judged to some degree by the fact that educational programs for young children are increasing rather than decreasing. Approximately 43 percent of the nation's 5-year-olds attend kindergarten today, while in 1930 the figure was only 30 percent. Economy measures, room requirements, depressions, and war years have influenced this phase of education, but the evidence from recent years indicates that the kindergarten is continuing to grow, and will extend its program to rural groups in the 1960s.

It is unwise to eliminate 4- and 5-year-old programs because the neighboring city doesn't have them, because of lack of state aid, inconclusive statistical proof of its value, inadequate space, or because colleges do not train teachers to distinguish between kindergarten and primary grade programs. Such reasons ignore the key to

¹ Reported by Yolanda Bergamini in *School Executive*, (December, 1954), pp. 54-55; Ruth P. Koshuk in *Journal of Experimental Education*, 16 (1946), pp. 134-148; and Willis E. Pratt in *Journal of Educational Research*, 43 (1949), pp. 525-533.

² Neith Headly and Josephine Foster, *Education in the Kindergarten*, American Book, 1948; Clarice Wills and William Stegeman, *Living in the Kindergarten*, Follett, 1950; Helen Heffernan and Vivian Todd, *The Kindergarten Teacher*, Heath, 1960; Samuel Parker, *General Methods of Teaching in Elementary Schools*, rev. ed., Ginn, 1922; Roma Gans, Celia Stendler, and Millie Almy, *Teaching Young Children*, World Book, 1952.

American educational patterns. The American school community first must look at itself and ascertain the need for a program; then the professional school can lend information and direction in the field. Through study, comparison of programs, and outside expert advice, the local school district will be able to decide whether it should have a kindergarten program.

Making and implementing the decision, does not end the task of evaluation. Today's kindergarten program must be different from that of the 1930s. America is becoming more urban and mobile; these factors as well as our present state of civilization require the school board to continue its study of the kindergarten program and be prepared to modify it in keeping with changing conditions. Only with consistent and continual investigation of the problems of the kindergarten's value can we hope to have more definite words to say on the subject in the future.

Should schools have 4-year-old junior kindergarten programs?

This question has already been half-answered in the first chapter, where primary education is defined as including the ages 4 through 8. Other aspects of the question find solution in the educational pattern in America. Each community must approach the subject from the standpoint of its particular educational needs, and its decision should be based on answers to two subsidiary questions: (1) Can a program within the community's means satisfy the needs as recognized by the local school group? (2) Will the school district keep constant check on the program to determine if it is satisfying the reasons for its existence?

Certain national and Western cultural conditions also help us decide the need for junior programs. Increased urbanization is limiting the young child's exploratory world, and organized education may be forced to fill the gaps. Employment practices are resulting in increased mobility, and the school may be the institution best suited to give the very young organized experiences with social groups. Also, today's smaller families may develop the need for children to acquire earlier experiences with their peers.

The growth of mass communication has fostered standard behavior patterns. The family was once the developer and protector of individual behavior, but now with home audiences watching television programs individual patterns are coming more and more to reflect

safe and accepted norms. Through careful programs that are geared to encouraging individual traits and behavior and developing unique characteristics, the school may keep alive the worth of individuality. The governments of the world seem to be leaning in the direction of socialism; and with this trend, people need to be trained in the satisfaction of being individuals rather than digits in a calculated force.

What is a good minimal entrance age in organized education?

The National Educational Association Research Division, in a 1954 pamphlet, *Minimum Admission Age for Kindergarten and Grade 1*, shows the current interest in this problem. Some believe that the success of a program is determined by the chronological age rather than the experience level of the pupils. There is some trend toward the raising of the kindergarten entrance age—children must turn 5 by September, October, or November rather than by February, March, or April. Neith Headly speaks for the kindergarten teachers who feel that there is wisdom in raising the minimum age, but we wonder whether it is a good thing to deprive 4-year-olds of school opportunities.

This thinking makes one wonder if the kindergarten program hasn't already, in the minds of some teachers, become a fixed pattern preventing those chronologically younger children from fitting in—not because of possible experience level but because of a belief in age characteristics. There must of course be some entrance criterion in any educational program; whether age is the requirement is a problem for determination according to local needs and the school curriculum design. Unfortunately, age entrance requirements are often included in state aid programs. Teachers must watch this governmental directive carefully lest the educational programs be guided by how many dollars per head will be received and not by what the local school district needs in its program.

The 1953–1954 entrance admission figures given in the NEA pamphlet show that approximately 70 percent of the schools have kindergartens with minimal requirements of 4 years and 8 or 9 months by September 1. Over half of our schools enrolling students under 6 in educational programs demand that the children be 5 by December 1 or January 1. State laws and local board regulations make the provisions for entrance, and very few schools offer any alternate for children who do not meet this age standard.

The validity of any local school program may be judged by whether it is established only to satisfy state obligations or to meet changing local demands. Whatever the minimum entrance age, each teacher, administrator, and school board should design the program with a range in experiences to meet and encourage individual variations.

Should a child be retained at the 4- or 5-year-old level?

Promotion policies at any grade level should be determined according to school facilities and practices, chronological age, and the individual pupil's (1) mental age, (2) physical development, (3) emotional stability, (4) social adaptability, and (5) oral facility. These no doubt will change as we acquire better measuring tools for achievement.

Because chronological age is the most stable of all the personal factors, this does not exempt the school personnel from using other perhaps more pertinent measures. Each child should be retained or promoted on his own pattern analysis. What was he like before the class experience? What changes have been recognized by the parents, teacher, and child? Are there any extraneous reasons for considering retention, such as mobility of residence, prolonged illness, and family adjustments? Including personal factors is a very important part of the retention question. If the school personnel involved do not base their view of a child on specific recognizable and communicable behavior, then the worth of the decision is debatable.

Rigid promotional practices do not help the child who is in trouble; the threat of retention does not inspire greater achievement—the child who is held back seems to have greater difficulty adjusting socially and does no better if the curriculum conditions remain the same.

These findings do not release the school from its obligation to consider each retention case on its own merits. The decision should be based on as concrete and specific information as can possibly be obtained.

Should the primary school be ungraded?

Before any radical organizational change from the usual grade division into grades is undertaken, much research will be needed to insure that these changes are a result of scientific investigation. A great deal will be said about new designs for effective learning,

and more statements will be made against the lock-step grade plan. Plans are made by man, and should be modified, improved, or cast away as conditions require; but mere organization is not the key to effective learning. The learning situation is paramount. Prior to even moderate changes, consideration should be given to all of the controlled features. There is an old proverb that must have been used to train midwives and nurses: "Don't throw the baby out with the bath." Perhaps we too should use it!

How much grouping should be done in the primary grades?

A partial answer to this question can be found in the many types of grouping that have been attempted and practiced. Identifying them should help decide what should be the rule for a particular school.

1. *Ungraded groups.* In early rural schools these were called one-room groups. There was one teacher for all grades. Today the plan of ungrading groups moves children out of the K-3 organization as they reach certain points of achievement; they proceed from one set of educational tests to another rather than from grade to grade. Ungraded groups are so similar to one-room teaching that for all practical purposes they put us back to where we began over a hundred years ago.
2. *Grade grouping.* One teacher works with a given age group. This is the dominant pattern in our teaching kindergarten through the third grade (K-3).
3. *Heterogeneous grouping.* Children are placed in a class according to chronological age, and the individual variations are met through plans directed by the teacher.
4. *Homogeneous grouping.* This plan places children with like achievement, intelligence, or readiness scores together.
5. *Specialist grouping.* Under this plan children are sent in groups to a special field teacher who specializes in one phase of the curriculum.
6. *Woodring grouping.* This plan, advocated by Paul Woodring in 1957, synthesized the ungraded, homogeneous, and individualized plans in a modified ungraded program. Woodring would have K-3 teaching consolidated in an ungraded primary section where able children would spend two years and the less gifted might study until the age of 9.
7. *Social maturity groups.* This plan calls for putting all of the

socially adjusted or friendship patterns together rather than dividing the groups by chance.

8. *Organismic developmental grouping.* Through indexes of physical, mental, and social growth patterns, children would be arranged according to body, social, mental, and interest types.
9. *Teacher-pupil personality grouping.* This concept is linked with the belief that the teacher must be assigned to the class best suited to her social-mental level. IBM cards should be used to make the pupil-teacher selection or feelings might be hurt.
10. *Intraclassroom grouping.* Within the classroom the pupils are arranged by subjects, learning levels, and occasionally by social maturity. The term *ability grouping* is also applied to this practice, which is often used in reading instruction.

Grouping practices can be no better than the teacher and the school's philosophy. Teachers may better appreciate grouping problems and plans for adoption if they consider the difficulties that prevent any of the existing grouping plans from being ideal. The primary grades cannot at present provide the teacher with a reliable measurement of a child's intelligence, achievement, social maturity, and leadership qualities. As a corollary, the spiral growth pattern of the young child prohibits rigid grouping practices; one is never positive that a child is on a plateau of growth or on a spurt that will not last.

The mobility of the American family is making it more difficult to acquire information on the children entering our schools. The lack of standard practices and unreliability of written judgments make any refined grouping practice ineffective. The rapid turnover of teachers, also, will affect the success of a grouping program, as will the reaction of all the school personnel.

There are some among us who would go back to the one-room plan, even to the point of doing janitor duties, if we could escape the impossible task of making an inschool grouping plan uniform. The competence and leadership of the administration is required for any grouping program if it is to work well.

Will team teaching or teachers' aides be effective in the primary grades?

The answer to this question will necessarily rest on the evidence provided by the various programs used throughout the nation. The

Wisconsin plan, the Harvard plan, and others will need unbiased evaluating. We have many good reasons to expose children to teams and to help the teacher with the countless tasks in the classroom, but will the budget and facilities sustain the proposed plans?

A form of team that has not been given much testing in the primary grades is the man-and-wife team. Schools are losing too many women teachers to marriage, and not enough men are teaching the primary grades. Could not the pair who married because of mutual selective qualities be the natural team to instruct the young? The training institution that makes capital of the emerging pattern of young marriages and demonstrates to young couples the satisfaction of working together as man and wife may be providing the primary school with the ingredient that has been absent since the selection of the female as the better teacher for the young with, as many have surmised, little reason other than sentimentality.

Any form of teaching that utilizes teachers' aides, master teachers, and cooperating supervisors tends to develop what C. L. Barnhart calls a "celestial" hierarchy—"a collective body of angels"; since the hierarchy in the classroom can result in differences of approach that could confuse the children, such practices should be exercised with care.

Curriculum and Content Problems

A great number of the questions badgering the educators of the young child have to do with the curriculum. Here again the complete answers are not known, but the writer hopes that the discussion will encourage the reader to further thought.

How can we meet individual differences when we instruct?

Teachers of this generation have been taught that because of the range of ability in any classroom it is impossible for all participants to reach a given normative level. To enable each child to reach a normative level, various procedures have been developed. Grouping, extensive reading, individualized contrasts, enrichment activities, special teachers, and multitrack texts have all received attention. Some of these techniques have produced acceptable behavior growth, but they do not seem to furnish a complete or satisfying answer.

Suppose we approach the problem by first accepting and respecting what we will call the natural law of disconformity, according to which an individual's inherited base of itself keeps him from becoming a carbon copy of anyone else, even in a highly organized society. Education in a democracy offers equal opportunities for individuals to be exposed to the curriculum patterns. Curriculum patterns should be sought that direct the disconformity determinants and educate the student to think, express himself, act, react, and be responsible as an individual.

Above and beyond the inherited agents that control individuals, there are three other forces operating to make each person different. Sex and socioeconomic factors contribute to making the human a complex, vital creature. Both of these forces interact with major cultural patterns to modify the human's basic personality structure.

Instruction that considers individual differences first recognizes the fact that these contributory elements are part of life, and that the primary goal is to make each person recognize his individual pattern and worth. The means to that goal is direct education from the disconformity base in the opportunities that have been made available because of human heritage.

After accepting the fact of disconformity, educators should plan each grade to represent an essential spiral step toward the achievements of ultimate goals. There should be overlapping lessons in those basic elements, patterns, or concepts that are at the heart of each content area. The methods used at the primary level should differ only in degree or emphasis from those used at any other time in the educational life. In 1937 Ernest Horn gave sound advice on teaching the individual. He suggested that each class provide instructional equipment of a range of difficulty and depth of treatment commensurate with the range of ability at each level.³ With a range of material available in each class, appropriate methods, and an understanding of goals coupled with the recognition of the law of disconformity, the teacher should be meeting the needs of each child.

Are concrete experiences the dominant methodology of primary instruction?

This question reflects the thoughts and confusion of the ages. Since Rousseau's time concrete personal experience has been stressed as

³ Ernest Horn, *Methods of Instruction in the Social Studies*, Scribner, 1937.

the means of preventing bookishness and verbalism. Suggestions for having the primary child involve his "whole" self in the curriculum include (1) directly participating in field trips, (2) handling and viewing objects, models, and pictures, (3) constructing materials, and (4) hearing guest speakers and visitors.

Each of these approaches should be examined by primary teachers, but it is unrealistic to consider them better than or in direct opposition to books and oral presentation. The issue is not whether there is too much verbalization and reading or too many concrete experiences, but rather the choice that will give the child accurate understanding.

Direct participation in field trips was conceived for the fundamental purpose of giving the child experience with the unit problem in its natural environment. The typical field trip in the primary grades takes the child out of the school grounds for a short school time. The value of pupil participation in an out-of-class activity is that it provides a common experience for all children in the group and a basis for later class discussion. It personalizes the unit topic and provides first-hand observation for better understanding.

In planning field trips, the primary teacher should keep certain conditions in mind.

1. The field trip should be selected because it will make a meaningful contribution to the unit under study.
2. Children should be carefully pretested to discover whether they already possess the knowledge that the teacher wants them to acquire from the journey.
3. The pupils must be able to recognize and verbalize the purpose for the trip.
4. The incidental elements of the trip—the rules, the method of report gathering, and the behavior of the pupils—must be planned cooperatively.
5. There must be a decision on the pertinent problems to be solved or information to be obtained at the destination.

After a teacher has decided on the purpose and content of a unit, she may profitably have the pupils collect and use pertinent objects, models, and pictures. These will contribute to meaningful understanding to the degree that their handling deepens the generalizations concerning the unit. In teaching an impressional unit on Valentine's Day, there would be instructional value in having children

see the valentines from years past, but the object methodology should be limited to valentines personally constructed or received.

It is a persistent and very real problem to procure objects, models, and pictures for the class at the time they are needed. Schools need better instructional materials centers which will help a teacher secure the best items for a unit or suggest ways of using them effectively. An instructional materials center should be more than an audiovisual catalogue in a vacant room; it should encompass the media of flat pictures, models, objects, and museum displays; supply sources for obtaining materials; and furnish the services of a staff member.

Reading the published accounts of the numerous projects constructed by pupils which teachers have used in the primary grades gives the serious educator serious misgivings. The potential educative value of having children plan an activity has been lost in the "good" reasons given for the act—the need for self-expression, creative enterprise, therapeutic aspects, learning by doing. Craft involvement appears in group-made murals, tension is released during finger painting, and design is taught through dipping string in paint and dropping the sopping thing on paper! At its very best, allowing pupils to construct a project or object does vitalize and personalize learning, but it is necessary for the adult guiding the activity to keep certain basic criteria in the foreground. The construction activity must (1) be authentic, (2) have a direct contribution to make to the topic or problem under study, and (3) have a relationship to critical thinking and be a stimulus to mental thought.

Making a kite can stimulate thinking, but only if it is made of authentic materials, not of a sheet of paper cut in a diamond shape and attached to a three-foot string. The children might compare theirs with commercial kites or pictures in order to recognize and think through the differences. Kite making can be used in studying the principles of flight or toys that have been used through the years, or as a comparative cultural topic such as children's activities from around the world.

Making models that indicate a function, form, structure, or principle serve education well. Models of looms, hour glasses, water clocks, buildings, scales, modern clocks, thermometers, bridges, earth profiles, and the human body should be conspicuous in the primary school.

There are a great number of construction projects that children

can do which will satisfy the given three criteria. School budgets must be expanded to cover the costs of the materials or teachers will be hampered in this type of work. The teachers who have to supply the material purchase the minimum required and substitute ingredients when possible. It would not be unwise to reconstruct the budget with larger appropriations for such materials and smaller amounts for construction paper.

Guest speakers and discussion leaders lend reality and truth to the study of a topic or problem by offering information "straight from the horse's mouth." Of course, it is important not to invite a "horse of a different color"—one who will not contribute to the subject. This method of improving and enriching instruction is valuable when care is given to the selection of the guest. Having a visit from a policeman is a common experience in a great number of primary grades; the invitations should be expanded to engineers, veterinarians, custodians, secretaries, bankers, businessmen, hobbyists, reporters, grandparents, and others who have material or abilities which bear on the topic at hand.

A consideration of the qualifications of the guest will emphasize the "living" quality of the topic under study. But only when pupils and teachers know what it is they wish to learn can qualified persons—and there are many in any community—be asked to enlighten the class through either panel or direct discussion.

What can the classroom teacher do about the bilingual child?

The first reply to this question is simply to accept the bilingual child and nurture him. The class should be made to benefit from his different background experiences, and even though he may be somewhat slow in acquiring the second language, the benefits outweigh the drawbacks in time.

America has moved from the naive position of considering, silently or vocally, that a second language was for the sophisticated intellectual. A knowledge of the structure of language has revealed that the oral learning stage is all-important in every language. Primary teachers should become acquainted with the working blocks of all languages—phonemes, accents, gestures and morphemes.

Working with a group of bilingual children begins with a respect for all languages, knowledge of the interrelationship between native and second languages, awareness of the use that can be made of

two-language facility, and the pride of being at home in more than one language. The extra time it takes to keep a different language from that used in the classroom alive in a child or a group of children is the difference between teaching that comes from the heart and mind and that which comes only from the mind.

We should urge research and investigation for evidence that the young child can learn languages more easily than older persons. There are, of course, subjective judgments enough to warrant our efforts in the direction of teaching language early. One extremely good example is furnished by military personnel whose families have lived abroad; they all seem to have found that the children learned the local speech with much greater speed and ease than their elders.

With such knowledge at hand, classrooms that have a second language "informant" in their midst should capitalize on the opportunity to start America on the road to being linguistically literate.

What is good discipline for the primary child?

The wording of the question suggests that there is a normative pattern of behavior. If this question may be interpreted as implying that being *good* is doing what one is told to do or accepting what is imposed upon one, then we need to take another look at the behavior patterns we have come to accept. *Discipline* is a word derived from *disciple*, and it originally referred to the actions of one following a leader. Today we do not attempt to train children by having them follow a leader, either blindly or willingly. Effective discipline first considers that children will grow in and out of behavior patterns in relation to the rewards received from those patterns. This process of growth depends on the child's adaptability and his self-control at work as he makes decisions to accept or reject such patterns on specific occasions.

Discipline should never be a set of rigid rules or overexercise of the adult's authority. The young child needs limits, but these limits change with individuals, classes, and ages. Limits which are necessary for the young child should be explained and established with the child's understanding.

Discussing a problem while the emotions are still high is a loss of words and effort. It is wiser to ask the child or children who are allowing their emotions to dominate a behavior to change activities or to remove themselves, not from the room but to another place,

nearer the teacher or to the side where visual participation is still possible. A teacher who has had to limit and direct a child's reaction should re-establish an understanding relationship with him before he leaves the school building. Censuring a childish act is sometimes needed, but censuring the child is another thing. Children should learn that forgiveness is as important as remembering. Sentimental approaches to discipline by having "remembrance chairs," pupil proctors, isolation corners, and conduct marks misdirect the intellectual effort needed to develop self-discipline. Children are not mature adults, and an infringement now and then of little-understood social customs should be met with humor, direction, and reassurance of individual worth.

This discussion will mean nothing to the beginning teacher who is criticized for her lack of discipline and who later discovers it was because she allowed the children to be noisy. Whenever a teacher feels the pupils are taking the class in their own hands or that one pupil is following a divergent path of behavior, it is wise for her to ask why. Children, either as individuals or as a group, do not want to perform unreasonable acts. When such behavior exists it more often results from misunderstanding and immaturity. Education and redirection can help the first and time and patience will change the latter.

How can the primary teacher preserve the child's creativity?

We have not successfully analyzed what creativity really is, and yet this question presupposes that the primary teacher should be able to identify the creative child and keep him that way. Many words have been spoken and written about creativity, among them the statements presented here. It is interesting to read them and try to make some form and substance from their implications.

Who is the creative child? He is every child in every classroom and every home.

In creative expression the child attempts to show how he feels about people, objects, and experiences.

Creative self-expression means the giving forth of something which is tinged with personal attitudes, convictions, or desires.

Each individual has within him potentials for creativity that have not been tapped.

Creative expression affords children a controlled emotional outlet.

Our species is the only creative species and it has only one creative instrument, the individual mind and spirit of man.

There are two kinds of creativity, (1) potential and (2) functional.
 Creative thought exists when consciously acquired knowledge interacts with intuition (subconscious awareness).
 The creative person is one who feels compelled to state, . . . record, or materialize his thoughts.
 The child is a potential creator; his creativeness is born of real enthusiasm and joy of expression.
 Imagination is a factor in creativeness.
 A creative child is relaxed.
 A creative child is happy.
 The creative individual is the flexible, adjustable being.
 You can only create with what you can recall.
 In creative work nothing is more important than the thing being experienced.
 Creativity is the process of using knowledge as stepping stones to new experiences.

As we read these statements, a cluster of ideas can be organized which may help answer our question. Creativity is a personal force that expels its energy into a form when knowledge, conditions, and emotions interact to allow it to function.

With only this brief survey of the thinking surrounding creativity, it may be said that the primary teacher should (1) teach individually at all times even though she uses group procedures; (2) permit individual reaction, variation, and extension of things taught; (3) try to discover if the child is utilizing both feelings (unconscious awareness) and consciously acquired learning; and (4) encourage imaginative expression and activities.

Until the factors that make this mystical act are identified, the primary teacher can only go on her own analysis of what others have to say about creativity and play the class situation by ear. Two ingredients seem to be in a number of the statements—*knowledge* and *personal spirit*. These can be reduced to the words *facts* and *feelings*, each of which need direction. It is, or so it would seem, a balance between facts and feelings that produces usable creative talents.

What can the classroom teacher in a self-contained class organization do for the "uncommon" child?

As we have said, the individuals in all classes should be considered as "uncommon" and not as predesigned or "normal" models. But there are children who have dominant traits or peculiarities that do not fit comfortably into the class pattern. Whatever these cases are,

even if they demand what seems to be an overconcentration of attention, the group will benefit by having the "uncommon" child in its midst. The physically handicapped child, the child with defective vision or speech, the child of a different race, the highly artistic child, the child with immature behavior patterns, the slow learner, the child who is gifted intellectually, the squirmer, the bully, the gabbler, and the shy child all contribute as much as does the "common" child in the group.

An approach that will make positive learning experiences out of the numerous problems arising in the group with a wide range of characteristics, or as we say the group that contains one or more "uncommon" children, can be developed if the teacher will hold the following points in mind:

1. The teacher must accept the child because of his "uncommonness."
2. She must be unemotional about the case or situations arising from it. When she discovers that emotion is governing the scene, she must make a reflective, and delayed, analysis of the situation.
3. She must devise accelerated, review, or decelerated lessons and occupations, as the case requires, that will provide independent activity for the child.
4. She must make any necessary physical accommodations for the child's special needs.
5. She must inform herself about any persons and any local, state, or national organizations that can give specific aid or direction for the parents and the child if such is needed.
6. She must keep a sense of humor when experiencing the many episodes that can arise when the class contains "uncommon" members.
7. Above all, she should remember that what is believed to be valuable for the average, normal, or common pupil to learn is also valuable for the "uncommon" child, even though he may require an "uncommon" teaching technique.

Should the primary-grade pupil have homework?

To attempt to answer this perennial problem involves us in the definition of the term *homework* and value judgments concerning time allotments and time consumption. Generally, primary teachers

advise that there be no regular patterned approach to homework for the young child except in the case of long absence, encouraging rather that library books be taken home for both independent and family reading sessions.

Parents and teachers must have a mutual understanding of what is meant by *homework*. Most parents think of it as school work to be finished or accomplished at home; few realize that homework could be free reading assignments, seeking home information about a definite problem, or finding pictures, articles, and statements that will enlarge upon a unit under study in school. The profession should communicate to parents that from the school's definition homework may mean independent projects to acquire ideas and information from other than school sources.

Research studies have not been overwhelmingly decisive on either side of the question of assigning homework, although we have sufficient subjective conclusions from numbers of writers. One general thought prevails throughout almost all the written material on the subject: routine, page-by-page, or lesson-sheet home assignments have not met with much acceptance, but patterned homework designed to fit the child's own needs has merit. This is to say that a child who has need for work in background reading, for instance, should have homework that directs him to more books or direct sources of information, while the child who has a good deal of background can be given assignments in evaluating sources of information and checking on the accuracy and reliability of the information itself.

In practice, schools generally accept the following notions about homework:

1. Homework is recognized as needed in the case of a prolonged absence to help bring the pupil up to date.
2. Primary grades lean heavily toward very general homework assignments.
3. Homework for the young child should be tailored to fit the individual child.
4. Homework should be an integral part or an outgrowth of the work done in the classroom.
5. Homework does not have to be a daily task. Long-term projects or activities are important.

6. Teachers and parents alike should check periodically to see if the child is in need of homework that will help him in specific areas demanding skill development.

The value judgment aspect of the homework question has other ramifications. Teachers and parents realize that certain cultural conditions bear on this issue indirectly. Mass amusements, mostly television, have usurped some of the out-of-school time, and there are general objections to the quality of the programs children are exposed to. Not every home furnishes the best physical conditions or the most suitable kind of atmosphere for homework. Some homes require the children to do chores, and these may be given priority over school assignments.

Whatever the home conditions and reactions to homework, they should be discussed in parent-teacher meetings. If there is general agreement on certain home recommendations, they should be communicated to all parents through the PTA organization and not the school administration.

The following general suggestions might be made the topic of PTA discussion on the home-school problem of homework.

1. Parents who assist the child in budgeting his out-of-school time should also help plan a time for the homework tasks.
2. A place to work away from general family affairs will help the child concentrate on homework.
3. Parents should realize that methods and approaches to subjects change through the years and that the child may not understand the parent's procedures. Teachers and parents should discuss these differences directly and not through the child.

The question of homework in the primary grades should be given careful scientific study so that field practices will not be swayed to one side or the other by subjective judgments.

Summary

The questions and half-answers—or workable answers—will be the primary teacher's homework. Teaching the young is a never-ending search for answers; yet we must not worry if we must accept half-answers or accept "pat" answers. A questioning mind is a healthy

mind; it becomes unhealthy only when it does not find questions. Consistent questioning may produce a primary school so dynamic that its precepts will be borrowed by the moon dwellers and the Martians.

The Mice in Council

Once upon a time the mice, being sadly distressed by the persecution from the cat, resolved to call a meeting to decide upon the best means of getting rid of this continual annoyance. Many plans were discussed and rejected.

At last a young mouse got up and proposed that a bell be hung round the cat's neck so that in the future they might always have notice of her coming and be able to escape. This proposal was hailed with great applause, and was agreed to at once unanimously. Upon this, an old mouse, who had sat silent all the while, got up and said that he considered the contrivance most ingenious, and that it would, no doubt, be quite successful. But he had one short question to put, namely, which of them was it who would bell the cat?

It is one thing to propose, another to execute.

Appendixes

Equipment for Play Purposes

Intellectual

- Books—10 per child, attractively and conspicuously displayed in a comfortable place for the child to sit and read
- Resource books on rocks, trees, birds, etc.
- Globe
- Maps—world, state, local
- Lotto games
- Card games—such as Piggy Bank
- Clock—real, with a second hand; demonstration clock; old clock that can be taken apart to see how it works; pendulum clock
- Time line, calendar
- Counting line
- Counting box—containing things to count
- Number cards
- Dominoes—commercial or made by teacher (4" × 8" rectangles cut from cardboard boxes and dotted with a marking pen)
- Abacus
- Thermometer
- Ruler
- Yardstick
- Timetables
- License plates (bicycle or car)
- Stop watch
- Price tags
- Tickets
- Compass
- Measuring spoons, cups, jars
- Level
- Scales
- Magnets—and an assortment of things to try them on

Magnifying glass—and items to look at such as bugs, printing, feather, leaf, etc.

Microscope—an inexpensive model

Prism

Ant hill—a commercial model or home-made (dig up an ant hill, going deep enough to get the queen, place it in a large wide-mouthed jar, cover outside of jar with dark paper so the ants will tunnel near the glass; place jar in a pan of water so the ants will not escape; feed the ants on crumbs of sugar, and keep earth slightly moist)

Fish bowl—each fish needs $\frac{1}{2}$ to 1 gallon

Terrarium—two: one for desert life, one for forest life

Cages—two: one for small animals like mice, hamsters, toads; a large one for rabbits, cats, etc. (a large glass goldfish bowl is also excellent for viewing pets)

Plants

Garden tools

Garden box

Individual electrical teaching machine

Museum exhibits—e.g., historical collection of valentines

Miniature

Dolls—rubber, cloth, stick, big, little, baby, girl, boy, and any other kind possible; and doll clothes

Dress-up clothes—both women's and men's, including hats, shoes, dresses, shirts, scarves, apron-type skirts, jewelry, belts, ribbons

Flower shop—flowers (perhaps grown by the children), money, cash register, watering can, seed catalogues, vases, flower pots, paper for wrapping

House corner

Living room—chairs, television, magazine rack, bench, telephone and telephone book, etc.

Dining room—table, chairs, dishes and dish cupboard, tablecloth, napkins

Kitchen—stove, refrigerator, washer, dryer, pots and pans, iron, ironing board

Bedroom—beds, dressers (with large, easy-to-open drawers for doll and dress-up clothes), bedding, mattress, pillows

Little theater—costumes, puppets, stage, curtain (old sheet on a wire), masks, props accumulated as needed, backdrops

Lunch or restaurant corner—tables, chairs, tablecloths, napkins, aprons, trays, menus, money, cash register

Post office—stamps, money, post cards, packages (perhaps suitably stamped for weight), canceling stamp, office window

Farm—barn, animals, tractors and other equipment, fences

Shoe shop—benches, measuring sticks, shoe bones, old shoes, shoe strings, polish, socks, purses, other items shoe stores now sell

Street signs—stop-and-go, railroad crossing, danger, etc.

Street and road equipment—cars, trucks, buses, road graders, dump trucks, tractors, etc.
Travel office—travel posters, tickets, money, cash register, globe, maps, travel packets of brochures, post cards, timetables, travel advertising displays

Therapeutic

Beads and strings
Clay table with 100 pounds of clay available—also modeling clay
Felt boxes—individual; make of cigar boxes with the inner lid covered with felt to contain felt pictures, numbers, shapes with which to experiment
Garden boxes and seeds
Grab bag of activities—can be used as a special treat such as allowing a birthday child to pick an activity listed in the grab bag, or, filling the bag with quiet games to play, as a way to interest a child who has disturbed the others
Mirror—large wall-type
Pounding bench or boards
Sand table and toys—perhaps made of plastic dishpan
Selected books
Soap—Ivory for soap bubbling with spools, straws, fists
Sponges—about 6, both natural and synthetic
Sticks—of the tree variety to make dolls, bows and arrows, etc.
Typewriter (old)
Water table—also possibly a plastic dishpan
Workbench and tools—saws, hammers, nails, U-clamps, vise, pliers, screws, screw drivers, drill and bits, plane, large assortment of scrap lumber (given away gladly at most lumber yards); all must be regular tools in small sizes, kept in perfect condition for safety

Sensory

Easels—1 for each 5 children, 6-8 brushes per easel, paint and paper
Individual and room blackboards
Sequence board
Magic slates
Manual film viewer and slides
Puzzles
Crayons—1 box per child
Pencils—colored, black, large soft-lead, regular, charcoal, etc.
Ballpoint pens—1 per child
Scissors (that really cut)
Paper—100 sheets each of red, orange, yellow, green, blue, purple, black, white, brown 18" × 24" construction paper; 1 ream 18" × 24" manila drawing paper; 1 ream 18" × 24" newsprint; 1 ream assorted 18" × 24" poster paper; 1 roll 24" × 180' butcher paper; 10 sheets tagboard; 4 sheets 4-ply poster board; 8 packages tissue paper

Paste and collage material
 Old magazines
 Old newspapers
 Wheat paste
 Finger paint and paper
 Chalk—white and colored
 Paper bags
 Sawdust
 Pipe cleaners
 Erasers—1 per child

Aesthetic

Selected pictures—from Rembrandt to Grandma Moses and Salvador Dali
 Selected art books—such as *Children in Famous Paintings*
 Filmstrip projector
 Opaque projector
 Selected vases and bowls—plus other materials for quick and easy flower arrangement
 Music books—a book of nursery songs, a general book, a book of old favorites and folk tunes, plus any of the teacher's favorites
 Tape recorder
 Radio
 Phonograph—high fidelity with diamond needle and dusting cloth
 Record holder or rack
 Selected records
 Piano
 Autoharp
 Triangle
 Bongo drums, barrel drums, snare drums
 Cymbals
 Tambourine
 Tone blocks
 Jingle sticks
 Maracas
 Clappers
 Castanets
 Rattles and shakers
 Gourds
 Sand blocks
 Bells
 Rhythm sticks

Physical Skill

Balance beam and line on floor on which to balance
 Balls—basketball size; medium size; golf or tennis ball size, or perhaps several sizes of whiffle balls

Basketball basket—a wastebasket can be used
Blocks—large blocks for building real buildings and for standing and sitting on; letter or similar-size blocks; parquetry or similar small blocks
Boxes—cardboard, or sanded wooden boxes of all sizes and shapes, some with tops, others without either tops or bottoms so that they may be crawled through
Climbing bars
Climbing ropes
Flight of steps—for use in building primarily unless school has no steps
Hills—to crawl and climb on
Hoops
Jumping ropes—1 for each 4 children, both long and short ropes
Slide
Stilts
Swings
Tricycle—1 for each 10 children
Wagon
Wheelbarrow or pushcart

Operating Materials

Room space—25–50 square feet per child
Outdoor play space—50–65 square feet per child
Cellophane tape
Masking tape
Colored tape
Stapler, staples, and staple remover or pliers
Needles—1 package large-size
Rubber bands
Straight pins
Safety pins
Master stencils
Ruler, yardstick
Large shears
Thumbtacks
Paper fasteners
Paper clips
Gummed labels
Marking pen
Felt
Boxes for storing equipment
Paste—2 gallons
String, yarn—primary colors, carpet warp
Cloth
Wallpaper
Sandpaper
Wood—mill ends

Nails—2- or 3-penny size
 Screws
 Rubber scraper
 Paint sticks—box of 500 tongue depressors
 Jars
 Rags
 Sponges
 Poster paint—2 quarts each of 10 colors
 Paint brushes—6-8 for each easel, $\frac{1}{4}$ -inch to 3-inch sizes
 Paper—100-sheet packages of 18" $\times$ 24" construction, etc., as listed previously
 Paper plates
 Paper bags
 Cardboard
 Paper napkins
 Cottage cheese cartons, milk cartons, dixie cups
 Newspapers
 Magazines
 Finger paint
 Chalk
 Pipe cleaners
 Plastic wood
 Wheat paste
 100 pounds clay
 Ivory soap—2 boxes
 Sand
 Scraps—lace, net, rickrack, ribbons, etc.
 Picture frames—made of cardboard
 Crayons
 Erasers
 Pencils
 Ballpoint pens
 Potting soil and pots
 Seeds
 Spout can for watering
 Fish and turtle food
 First aid kit

Literature for Impressional Treatment

A. Basic Stories

Aladdin and the Wonderful Lamp; Ali Baba; Androcles and the Lion; Belling the Cat; The Blind Men and the Elephant; The Brave Little Tailor; Bre'r Rabbit; Caps for Sale; Cinderella; Clever Elsie; The Country Mouse and the City Mouse; Dick Whittington and His Cat; The Dog and His Shadow; The Elves and the Shoemaker; Five Chinese Brothers; The Fox and the Grapes; The Golden Touch (King Midas); Hansel and Gretel; Henny Penny; Hudden, Dudden, and Donald O'Neary; The Husband Who Was To Mind the House; Jack and the Beanstalk; John Henry; King Arthur; Little Humpbacked Horse; Little Red Hen; Little Red Riding Hood; Old Woman and Her Pig; The Pancake or the Gingerbread Boy; Pandora's Box; Paul Bunyan; Pecos Bill; The Princess on the Glass Hill; Puss in Boots; Reynard the Fox; Rumpelstilskin; Sleeping Beauty; Snow White and the Seven Dwarfs; The Sorcerer's Apprentice; Stone Soup; The Straw Ox; The Three Bears; The Three Billy Goats Gruff; The Three Little Pigs; Three Wishes; Tom Thumb; The Tortoise and the Hare; The Traveling Musicians; Tyl Ulenspiegel; The Wooden Horse

B. Basic Book List

ANIMAL

The Biggest Bear, Lynd Ward; *Billy and Blaze*, C. W. Anderson; *Dash and Dart*, Mary and Conrad Buff; *Flip*, Wesley Dennis; *Green Eyes*, Abe Birnbaum; *The Hundred and One Dalmatians*, Dodie Smith; *Make Way for Ducklings*, Robert McCloskey; *One Horse Farm*, Dahlov Zorach Ipcar; *Story About Ping*, Marjorie Flack; *Wee Joseph*, William MacKellar

BIOGRAPHY

Abraham Lincoln, *Benjamin Franklin*, *Buffalo Bill*, and *Columbus*, four books by Ingri and Edgar Parin d'Aulaire; *Daniel Boone*, Esther Holden Averill; *George Washington*, Ingri and Edgar Parin d'Aulaire; *Leif Eric-*

sson, *Explorer*, Ruth Cromer Weir; *Little Brother of the Wilderness*, Meridel Le Sueur; *Mighty Men*, Eleanor Farjeon; *The Mission Bell*, Leo Politi; *My First Horse*, Will James; *Pocahontas*, Ingri and Edgar Parin d'Aulaire; *Saint Francis and the Wolf*, Hetty Burlingame Beatty; *Squanto, Friend of the White Men*, Clyde Robert Bulla; *They Were Strong and Good*, Robert Lawson

FANTASY AND IMAGINATIVE STORIES

The Amiable Giant, Louis Slobodkin; *And To Think That I Saw It on Mulberry Street*, Dr. Seuss; *Andy and the Lion*, James Daugherty; *The Borrowers*, Mary Norton; *Calico the Wonder Horse or the Saga of Stewy Stinker*, Virginia Lee Burton; *Charlotte's Web*, E. B. White; *Copy Kitten*, Helen and Alf Evers; *The Country Bunny and the Little Gold Shoes*, DuBose Heyward; *Curious George*, H. A. Rey; *The Emperor's New Clothes*, Hans Christian Andersen; *Ferdinand*, Munro Leaf; *500 Hats of Bartholomew Cubbins*, Dr. Seuss; *Great Geppy*, William Pène du Bois; *Harold and the Purple Crayon*, Crockett Johnson; *In the Forest*, Marie Hall Ets; *Jeanne-Marie in Gay Paris*, Françoise (Seignobosc); *Johnny Crow's Garden*, L. Leslie Brooks; *Just So Stories*, Rudyard Kipling; *The Little Engine That Could*, Watty Piper; *The Little House*, Virginia Lee Burton; *Madeline*, Ludwig Bemelmans; *Magic Michael*, Louis Slobodkin; *Many Moons*, James Thurber; *Mary Poppins*, P. L. Travers; *Millions of Cats*, Wanda Gag; *Mr. Popper's Penguins*, Richard and Florence Atwater; *My Father's Dragon*, Ruth Gannett; *No Fighting, No Biting*, E. H. Minark; *Rabbit Hill*, Robert Lawson; *The Story of Babar, the Little Elephant*, Jean de Brunhoff; *The Story of Doctor Dolittle*, Hugh Lofting; *Velveteen Rabbit*, Margery Bianco; *Where Is Everybody?*, Remy Charlip; *The World of Pooh*, A. A. Milne

FICTION

Andy and the School Bus, Jerrold Beim; *B Is for Betsy*, Carolyn Haywood; *Belinda's New Shoes*, Winifred Bromhall; *A Bell for Ursli*, Selina Chönz; *The Best Christmas*, Lee Kingman; *Big Snow*, Berta and Elmer Hader; *The Cat Who Went to Heaven*, Elizabeth Coatsworth; *Crow Boy*, Jun Iwamatsu; *First Thanksgiving*, Lena Barksdale; *Gift of the Forest*, R. Lal Singh and Eloise Lownsbey; *Happy Orpheline*, Natalie Savage Carlson; *Hundred Dresses*, Eleanor Estes; *Little Bookroom*, Eleanor Farjeon; *Little Girl with Seven Names*, Mabel Leigh Hunt; *Little Pear*, Eleanor Frances Lattimore; *Mei Lei*, Thomas Handfroth; *1 Is One*, Tasha Tudor; *Painted Pig*, Elizabeth Morrow; *Papa Small*, Lois Lenski; *Rain Drop Splash*, Alvin Tressalt; *Roger and the Fox*, Lavinia Davis; *Snipp, Snapp, and Snurr and the Gingerbread*, Maj Lindman; *Tag-along Tooloo*, Frances Clarke Sayers; *This Is the Way*, Jessie Mae Jones; *Village Tree*, Jun Iwamatsu; *Wait for William*, Marjorie Flack; *Yonie Wondernose*, Marguerite De Angeli

FOLK TALES AND FOLKLORE

Beyond the Clapping Mountains, Charles Edward Gilham; *Dick Whittington and His Cat*, Marcia Brown; *Don't Count Your Chicks*, Ingri and

Edgar Parin d'Aulaire; *Fables of Aesop*, Joseph Jacobs; *Five Chinese Brothers*, Claire Huchet Bishop; *Fun in American Folk Rhymes*, compiled by Ray Wood; *The House That Jack Built*, Antonio Frasconi; *Jack and the Three Sillies*, Richard Chase; *The Nutcracker*, Warren Chappell; *Ol' Paul*, Glen Rounds; *Old Woman and Her Pig*, Paul Galdone; *Pecos Bill*, James Bowman; *Peter Piper's Alphabet*, Marcia Brown; *Rooster Crows*, Maud and Miska Petersham; *Stone Soup*, Marcia Brown; *Tall Book of Mother Goose*, Feodor Rojankovsky; *Tall Tale America*, Walter Blair; *Tyll Ulenspiegel's Merry Pranks*, Moritz Adolf Jagendorf; *Uncle Remus*, Joel Chandler Harris; *Yankee Doodle's Cousins*, Anne Malcolmson

HISTORICAL FICTION

The Apple and the Arrow, Mary and Conrad Buff; *Caddie Woodlawn*, Carol Brink; *Christmas on the Mayflower*, Wilma Hays; *The Courage of Sarah Noble*, Alice Dalgliesh; *Dolls' Christmas*, Tasha Tudor; *Egg Tree*, Katherine Milhous; *Little Red Lighthouse and the Great Gray Bridge*, Hildegard Swift; *Matchlock Gun*, Walter D. Edmonds; *Schoolhouse in the Woods*, Rebecca Caudill; *Tom Whipple*, Walter D. Edmonds; *Tree in the Trail*, Holling C. Holling

HUMOR

Anatole, Eve Titus; *Ape in a Cape*, Fritz Eichenberg; *Bears*, Ruth Krauss; *Cautionary Verses*, Hilaire Belloc; *The Day the Cow Sneezed*, James Flora; *Epaminondas and His Auntie*, Sara Cone Bryant; *Fast Sooner Hound*, A. W. Bontemps; *Great-grandfather in the Honey Tree*, Samuel F. Swayne; *Horton Hatches the Egg*, Dr. Seuss; *Lentil*, Robert McCloskey; *Lion*, William Pène Du Bois; *The Perfect Pancake*, Virginia Kahl; *Roundabout Turn*, Robert Charles; *Thidwick, the Big-Hearted Moose*, Dr. Seuss; *Was It a Good Trade?*, Beatrice Schenk De Regniers; *What Do You Say, Dear?*, Sesyle Joslin

INFORMATION BOOKS

A Is for Apple and Why, Robert H. Jones. This is the story of the alphabet presented in a manner that gives depth to the subject, in which the primary child will be involved the rest of his literate life.

Air All Around, Tillie S. Pine and Joseph Levine. It is amazing how meaningful some writers can make those elements that one cannot see, cannot taste, and cannot smell!

America's Stamps, Maud and Miska Petersham. The history of America can be learned in stamp-size packages by reading this book. The child who is introduced to it by a teacher who can unfold the content imaginatively section by section may subsequently find himself involved in the fascinating hobby of collecting stamps.

Egg to Chick, Millicent E. Selsam. This is a very simple introduction to vertebrate embryology which describes the internal changes in the chicken egg from the time it is laid until the young chick emerges.

Engineers Did It, Duane Bradley. Here is a description of the world's

most spectacular engineering feats with simple explanations of the scientific principles involved.

Fun with Astronomy, Mae and Ira Freeman. Simple experiments and excellent illustrations introduce the sky to the young reader. If the authors had eliminated the *fun* from the title, the book would still be of worth for children.

How Big Is Big?, Herman and Nina Schneider. The child fits into the universe in proportion to the concepts and insights that he acquires concerning the size of things. This book helps the young student find his right place and size in the world.

How the First Men Lived, Lancelot Hogben, ed. Lancelot Hogben, with the aid of Marie Neurath and J. A. Lauwerys, takes up the tasks that were so well pioneered by Hendrik Van Loon. Outlined studies of man are a very good framework on which to hang the knowledge children will acquire in the process of living.

How Much and How Many?, Jeanne Bendick. Here is the story of measurement and its present-day use in rocketry, atomic science, and space exploration.

It Looks Like This, Irma E. Webber. This book and one other by the same author, *Up Above and Down Below*, will some day, if they have not already, move into the realm of the classics. Comenius would have wanted her as a writer. The primary grades have been accorded more meaningful written material since the appearance of these two works.

The Mighty Atom, John Lewellen. The curiosity that prompts children to keep asking questions can be satisfied by this quality of information material.

More Pictures To Grow Up With, Katherine Gibson. With the emphasis today on accepting the child's work as a creative endeavor, there may be a tendency to exclude needed experiences with adult art. This book opens doorways to many artists' private worlds of visual joy.

Not Only for Ducks: The Story of Rain, Glenn O. Blough. Here is a simple story of the water cycle which compares favorably with William R. Scott's *This Is the Water That Jack Drank*.

Paddle-to-the-Sea, Holling C. Holling. An Indian boy launches a toy canoe on a geographic adventure. The St. Lawrence River and the northeast section of America have never been so beautifully portrayed as in this book. All of Holling C. Holling's books with their colorful plates and innumerable marginal drawings are excellent information sources.

Play with Seeds, Millicent E. Selsam. From seaweed to seed may seem a far-fetched progression, but Millicent Selsam can make the pathway of seeds seem like play to the listener or reader.

Reading Can Be Fun, Munro Leaf. In spite of the trite title of this and many other Munro Leaf books, there is no doubt that the author makes sense out of very abstract concepts for the inexperienced person. In this book he presents the base that could easily become the reference point for foundation learning in reading. Don't underestimate Munro

Leaf's drawings or script because of their simplicity; he presents sound ideas without major distortions.

Ride on the Wind, Alice Dalgliesh. Each new generation moves farther away from the events that made Charles A. Lindbergh the marvel of the then-new experience of flight. This accurate, simplified version of Lindbergh's own book, *The Spirit of St. Louis*, will make the young reader dream of conquering new frontiers.

See and Say, Antonio Frasconi. The author says, ". . . the idea that there are many nationalities speaking many languages is to me one of the most important for a child to understand," and presents his subject in a beautiful and scholarly fashion. Repeated use of the text and bold wood cuts will expose children to sound language habits.

Sixty Million Years of Horses, Lois and Louis Darling. Probably no other animal except the dog has inspired young and old alike as has the horse. The horse is used appropriately in this text to unfold the mysteries of evolution. Primary children of today will, like pupils of the past, adopt the horse as an unconscious symbol of primitive life.

Story of a Baby, Marie Hall Ets. The love of the artist for the beauty of life's creation makes this book an authentic and lovely volume for children and adults alike.

Swamp Life, Glen Rounds. The sensitivity with which the author presents his almanac of wildlife reminds the reader of Thoreau's ability to extract beauty from common murky swamps. With a touch of genius Glen Rounds has given us a valuable book—do not judge it hastily.

Treasure To See, Leonard Weisgard (a Museum Picture-Book). Who else could do a book to introduce children to the museum better than a Caldecott Award winner? This is a book to keep on the library table for children to pore over after its first reading.

Tune Up, Harriet E. Huntington. This book and two others by Harriet Huntington, *Let's Go Outdoors* and *Let's Go to the Seashore*, display the touch of the artist in the photography and corresponding legend. *Tune Up*, a book on orchestral instruments, should leave indelible impressions on the reader.

What's Inside of Me?, Herbert S. Zim. This book will help the child understand his body. The pictures and detailed text printed in bold script insure that the content will fit the experience of a wide range of interests.

You Can Write Chinese, Kurt Wiese. Here is an information book that encourages activity. The young reader will want to get a brush and paint a story in Chinese.

INTIMATE BOOKS

A Apple Pie, Kate Greenaway; *A Is for Annabelle*, Tasha Tudor; *The Ant and the Bee*, Angela Banner; *Caps for Sale*, Esphyr Slobodkina; *Copy Kitten*, Helen and Alf Evers; *First Graces*, Tasha Tudor; *A Friend Is Someone Who Likes You*, Joan Anglund; *Golden Egg Book*, Margaret Wise Brown; *In the Forest*, Marie Hall Ets; *Marigold Garden*, Kate

Greenaway; *My Mother Is the Most Beautiful Woman in the World*, Becky Reher; *The Night Before Christmas*, Clement C. Moore; *Storm Book*, Charlotte Zolotow; *The Story of Little Black Sambo*, Helen Bannerman; *Tailor of Gloucester*, Beatrix Potter; *The Tale of Peter Rabbit*, Beatrix Potter; *Thank-You Book*, Françoise (Seignobosc)

POETRY AND VERSE

All Together, Dorothy Aldis; *Christ Child*, Maud and Miska Petersham; *Four and Twenty Blackbirds*, Helen Dean Fish; *Frog Went A-Courtin'*, John Langstaff; *In the Beginning*, Alf Evers; *In My Mother's House*, Ann Nolan Clark; *Lavender's Blue*, Kathleen Lines; *Marguerite De Angeli's Book of Nursery and Mother Goose Rhymes*; *More Silver Pennies*, Blanche Thompson; *Over in the Meadow*, John Langstaff; *Oxford Nursery Rhyme Book*, Iona and Peter Opie; *Rainbow in the Sky*, Louis Untermeyer; *Ring-a-round*, M. P. Harrington; *Sing-Song*, Christina Rossetti; *A Small Child's Book of Verses*, Pelagie Doane; *Small Rain*, Elizabeth Orton Jones; *This Way, Delight*, H. E. Read; *Tirra Lirra*, Laura E. Richards

Music for Impressional Treatment

A. *Suggested Classification and Listings of Songs*

"FILL IN" SONGS

ABC Tiger; The Ballad of Daniel Boone; Cinderella; The Clown; Eency, Weency Spider; Follow On!; Hiking Song; I'm Dressing Myself; I'm a Little Teapot; The Little Fireman; Little Red Hen; Puffybellies; Red Fox's Song; Rig-a-Jig-Jig; Said the Clock: Tick Tock; Ta-Ra-Ra-Boom-Der-E; Ten Little Indians; Winnie the Pooh Songs (Frank Luther version); Zipper Song; Zoo Train

GAME AND ACTION SONGS

Bluebeard; Come Dance with Me; Green Grow the Rushes—O!; Ich Bin der Musikant (I Am a Fine Musician); In and Out the Window; John Brown's Body; Jumping Song; The Little Gray Ponies; Little Red Wagon; Little Sailor's Dance; Little Sally Waters; Looby Loo; Monkey See, Monkey Do; The Monkey Song; The Old Gray Mill; Paw Paw Patch; Les Petites Marionnettes; Playmates (And Bring Your Dollies Three); Round and Round the Village; See, How I'm Jumping; This Old Man; A Visit to My Little Friend

LULLABIES

All Through the Night; At Twilight; Bye, Baby Bunting; Au Clair de la Lune; Go to Sleep; Hush, Little Baby; I See the Moon; My Pigeon House; No, I'm Not Sleepy; The Stars and Me; Toora-Loora-Looral

NATIONAL SONGS

America; Army Air Corps Song; God Bless America; The Marines' Hymn; On, Wisconsin; The Star-Spangled Banner; Takes Everybody To Build This Land; Waltzing Matilda; Yankee Doodle

OLD FAVORITES

The Bear Went Over the Mountain; Big Rock Candy Mountain; Billy Boy; Blow the Man Down; The Blue-Tail Fly; Buffalo Gal; Cindy; The

Crawdad; The Fly and the Bumble Bee; Frog Went A-Courting; Funiculi, Funicula; Grandfather's Clock; Home on the Range; Little Sir Echo; The Man on the Flying Trapeze; Mocking Bird; Oh, Dear! What Can the Matter Be?; Old Joe Clark; Old MacDonald; Polly-Wolly Doodle; Pop! Goes the Weasel; Reuben and Rachel; School Days; She'll Be Comin' 'Round the Mountain; Short'nin' Bread; "Sing," Said the Mother; So Long; Sweet and Low; Tell Me Why; There's a Little Wheel A-Turning in My Heart; Wait for the Wagon; Whoopee Ti-Yi-Yo

ROUNDS

Come, Follow; Frère Jacques; Kookaburra; Oh, How Lovely Is the Evening; Row Your Boat; Scotland's Burning; Three Blind Mice; White Coral Bells; Why Shouldn't My Goose

SPECIAL EVENTS SONGS

Christmas Bells; Easter Bonnet; The First Nowell; For He's a Jolly Good Fellow; The Friendly Beasts; Happy Birthday; Jingle Bells; O Tannenbaum; Over the River and Through the Woods; Pat-a-Pan; 'Round and 'Round the Christmas Tree; The Twelve Days of Christmas; Up on the Housetop; We Wish You a Merry Christmas; White Christmas

TONGUE-IN-CHEEK SONGS

Abdullah Bulbul Amir; Be Kind to Your Web-Footed Friends; Bulldog on the Bank; Don't Go Near the Water; Father, Put the Cow Out; Frog Music; Funniest Song in the World; I Had an Old Hound; John Jacob Jingleheimer Schmidt; Johnny Vorbeck; Laugh at the Gangly Giraffe; Mules; My Name Is Yon Yonson; Nine Men Slept in a Boardinghouse Bed; Oh, Where Has My Little Dog Gone?; Shoes Have Tongues; Silly You, Silly Me; Throw It Out the Window; Who Did?

B. Song Books and Records

The songs listed above may be found in the following sources and some on the list of records. Students and teachers desiring a comprehensive list of song collections, records, games, and rhythmic activities may obtain catalogues from Lyons, 223 West Lake Street, Chicago 6, Illinois, and Lyon-Healy, 243 South Wabash Avenue, Chicago, Illinois.

BOOKS

- American Folk Songs for Children*, Ruth C. Seeger, Doubleday, 1948
American Singer, Books One and Five, John Beattie *et al.*, American Book, 1944
Arnold Collection of Rhythms for the Home, Kindergarten, and Primary Grades, Francis Arnold, Lyon-Healy
Lullabies of Many Lands, Dorothy B. Commings, Harper, 1941
Music for Young Americans, ABC Music Series, Books One and Three, American Book, 1959

- The New Golden Song Book*, Norman Lloyd and Mary Blair, Simon and Schuster, 1955
The New Song Fest, Dick and Beth Best, eds., Crown, 1948
One Hundred and Forty Folk Songs, A. T. Davison and T. W. Surette, Concord Series, No. 3, Schirmer, 1921
Singing Time, Satis Coleman and A. G. Thorn, John Day, 1954
Songs To Grow On and More Songs to Grow On, Beatrice Landeck, E. B. Marks Music Corp., 1950, 1954
Songs of Mr. Small, Lois Lenski and Clyde R. Bulla, Oxford University Press, 1954
Voices of America, Irving Wolfe, Beatrice Krone, and Margaret Fullerton, Follett, 1957
We Like To Sing, Kurth Ungar *et al.*, Dent, 1954

RECORDS

- Adventure of Daniel Boone, Young People's Records, Inc., #425
 The Birth of Paul Bunyan, Young People's Records, Inc., #404
 The Circus Comes to Town, Tom Glazer, Young People's Records, Inc., #713
 Funniest Song, Groucho Marx, Young People's Records, Inc., #719
 Let's All Join In, Peter Seeger, Young People's Records, Inc., #403
 The Little Cowboy, Raymond Abrashkin, Young People's Records, Inc., #716
 Little Gray Ponies, Tom Glazer, Young People's Records, Inc., #735
 Mary Martin Sings for Children, Young People's Records, Inc., #731
 Nothing To Do, Children's Record Guild, #1012
 Singing in the Kitchen, Charity Bailey, Young People's Records, Inc., #730
 Train to the Zoo, Children's Record Guild, #1001

C. Suggested Musical Selections

APPRECIATION

Alborada del Gracioso, Maurice Ravel; *Andante Cantabile*, Piotr Ilyitch Tchaikovsky; *Carnival of Animals*, Camille Saint-Saëns; *Children's Corner Suite*, Claude Debussy; *Child's Introduction to Jazz*, Bob Rusham; *Au Clair de la Lune*, Claude Debussy; *The Comedians*, Dmitri Kabalevsky; *Country Dances*, Wolfgang Amadeus Mozart; *Divertissement*, Jacques Ibert; *Eine Kleine Nachtmusik*, Wolfgang Amadeus Mozart; *Enigma Variations*, Edward Elgar; *Exotica*, Martin Denny; *Façade*, William Walton; *The Farmer in the Dell*, Joseph Haydn; *Four Seasons*, Antonio Vivaldi; *Halleluiah Chorus*, George Frederick Handel; *Hansel and Gretel*, Engelbert Humperdinck; *Little White Donkey*, Jacques Ibert; *La Mer*, Claude Debussy; *Ma Mère l'Oya*, Maurice Ravel; *Mosquito Dance*, Paul White; *Music for Children*, Serge Prokofiev; *Music for a Child's World*, Jean Ritchie; *Music of Christmas*, arranged by Percy Faith; *Nutcracker Suite*,

Piotr Ilyitch Tchaikovsky; *Pop Goes the Weasel*, Lucien Caillet; *Rain, Dance of the Fly*, and *Teasing Song*, Béla Bartók; *Rodeo*, Aaron Copland; *The Sorcerer's Apprentice*, Paul Dukas; *Tapiola*, Jean Sibelius; *Three Fantastic Dances*, Dimitri Shostakovich; *Till Eulenspiegels Lustige Stiche*, Richard Strauss; *Toy Symphony*, Joseph Haydn; *Under the Spreading Chestnut Tree*, Karl Wienberger; *Variations on a Nursery Rhyme*, Ernst von Dohnshya; *Whistler and His Dog*, Roger Pryor

INSTRUMENTAL

Fantastic Dance (woodwinds), Paul White; *First Chair* (all instruments), selected by Eugene Ormandy; *Song of Quetecoatl* (percussion), Lore Harrison; *Sonata for Clarinet and Piano*, Paul Hindemith; *Three Little Feelings* (brass), John Lewis; *Three Pieces for Clarinet Solo*, Igor Stravinsky; *Trio for Percussion*, Warren Benson; *Violin Concerto in D Major*, Igor Stravinsky

INTERPRETATION

Adventures in a Perambulator, John Alden Carpenter; *Air de Ballet*, Solomon Jadossohn; *Ballet Mécanique*, Carlos Surinach; *Black Maskers*, Roger Sessions; *Chanticleer Overture*, Daniel Mason; *Childhood Rhythms*, Ruth Evans selections; *Children's Games*, Georges Bizet; *The Clock*, Adolf Kullak; *The Dance of the Tumblers*, Nikolai Rimsky-Korsakov; *Danses Méditerranéennes*, Robert Casadesus; *Fantasy Variations on a Theme of Youth*, Howard Hanson; *Firebird*, Igor Stravinsky; *Flying Birds*, Clara Anderson; *Folk Music of Canada*, Bowmar selections; *Galaxy 2*, Henry Brant; *Indian Suite*, Edward MacDowell; *Invitation to the Dance*, Carl Weber; *Leaves from the Tale of Pinocchio*, Bernard Rogers; *Little Train of Caipira*, Heitor Villa-Lobos; *March of the Little Lead Soldier*, Gabriel Pierné; *Pacific 231*, Arthur Honegger; *Peter and the Wolf*, Serge Prokofiev; *Planets*, Gustav Holst; *Quiet City*, Aaron Copland; *Rounds*, David Diamond; *Rugby*, Arthur Honegger; *Selections from McGuffy's Reader*, Burrell Phillips; *Signs and Alarms*, Henry Brant; *Slavonic Dance*, Antonin Dvorak; *Symphony No. 5½ (A Symphony for Fun)*, Don Gillis

MUSICAL FORMS

Amaryllis (old French rondo), Joseph Ghys; *The Azuma Kabuki* (Japanese folk songs and dances), Katsutoji Kineya; *Ballad for Band*, Morton Gould; *Commando March*, Samuel Barber; *Divertimento for Band*, Vincent Persichetti; *Folk Music of the United States* (Library of Congress, Archives of Folk Song), Helen Stratman-Thomas, ed.; *Gavotte (Mignone)*, Charles Thomas; *George Washington Bridge*, William Schuman; *Hungarian Dances*, Johannes Brahms; *Lullaby*, Johannes Brahms; *Minuet in G*, Ignace Paderewski; *Sousa Marches*, Bowmar selections; *Suite for Old American Dances*, Robert Russell Bennett; *Waltzes*, Johann Strauss

MUSICAL PARTICIPATION

American Favorite Ballads, Pete Seeger; *American Folk Songs for Children*, Pete Seeger; *Animal Fair*, Burl Ives; *Birds, Beasts, Bugs, and Lit-*

tle Fishes, Pete Seeger; *Goofy Songs*, Tom Glazer; *Hi, Neighbor: Songs and Dances from Free Countries*, prepared by UNICEF; *Mother Goose Songs*, Burl Ives; *Music at Christmas Time*, Lilla Pitts and Gladys Tipton; *Play Party Games* (vols. 1 and 2), Bowmar selections; *Singing Games*, prepared by Edna Doll; *Songs About Animals and Birds*, Dorothy Olson; *Songs We Like To Sing*, selected by Charles Leonard

Films for Use in Impressional Treatment

- Adventures of Andy*, 10 minutes, color, J. M. Stackhouse. A film documentary of a baby orangutan's life in the Bronx Zoo. Hospitalization, play, eating, and baths are among the episodes filmed.
- Adventures of Bunny Rabbit*, 11 minutes, black and white, Encyclopedia Britannica Films. The harrowing, eventful life of a rabbit. Enough is ventured in the trip through the woods and farmyards to satisfy even Peter Rabbit!
- Ali and His Baby Camel*, 11 minutes, color or black and white, Atlantis. Describes camels, their habits, and the uses to which they are put. Shows the baby camel playing, its behavior during a sandstorm, and Ali's care of it when it becomes sick.
- Andy's Animal Alphabet*, 8 minutes, color, March of Time. Alphabetical tour of the Bronx Zoo.
- "Art in Action Series," Encyclopedia Britannica Films. Excellent systematic and artistic handling of art concepts.
- What Is Art?*, 6 minutes, color
- Texture*, 7 minutes, color
- Color*, 6 minutes, color
- Line*, 7 minutes, color
- Light and Dark*, 6 minutes, color
- Form*, 7 minutes, color
- Beaver Valley*, 33 minutes, color, Disney. A medley of animal-life incidents starring the prowling coyote, the fun-loving otter, and the industrious beaver.
- Beginning of Picture Making*, 6 minutes, color, International Film Bureau. The art of children from the age of 3 to 7. Encourages children to paint for experience and pleasure.
- Begone, Dull Care*, 8 minutes, color, National Film Board of Canada. A gay visual expression of music painted directly on film by Evelyn Lambart and Norman McLaren. A bit jumpy in beat but a musical and art experience for impressional treatment. Not to be forgotten once seen.

- Black Bear Twins*, 10 minutes, black and white, Encyclopedia Britannica Films. Invasion of bears in a vacation camp inhabited by a family of humans.
- Boy of India: Rama and His Elephant*, 11 minutes, black and white, Coronet. The story of an 8-year-old boy who lives in Assam, India, and his life with his father, a mahout, who teaches him to handle an elephant.
- Christmas Songs*, 9 minutes, color, Post Picture Corp. The three songs "Jingle Bells," "Silent Night," and "O Little Town of Bethlehem" are depicted in musical scenes.
- Christmas Through the Ages*, 13 minutes, color, Encyclopedia Britannica Films. The customs and traditions of today's Christmas traced to other lands and times.
- Circus Day*, 22 minutes, color, Arthur Barr Productions. Arrival and unloading of the circus train with elephants and horses helping. An experience in Americana that all children may have although it is rapidly passing from the national scene.
- Clay Modeling for Beginners: What Will Clay Do?* 12 minutes, black and white, Tabletopper. A foundational view of what can be done with clay.
- The Cow and the Sprite*, 10 minutes, black and white, Coronet. Children can actually see the cow jumping over the moon in payment of a bet.
- The Cuckoo Clock That Wouldn't Cuckoo*, 11 minutes, color, Coronet. An old-world setting and a master clockmaker who mends a clock that fails to cuckoo unfolds a story for the young viewer.
- Emil und die Detektive*, 77 minutes, black and white, International Film Bureau. A German film adaptation of Erich Kästner's classic story of how young boys solve a crime. The viewer need not understand a word of the script to follow the adventure.
- Fiddle-De-Dee*, 5 minutes, color, International Film Bureau. Fanciful music-art form which develops the interrelationship of melody, form, and color.
- The Friendly Giant, No. 30: Cowboy Small*, 15 minutes, black and white, Indiana University Audiovisual Center. With a casual approach, the Friendly Giant explains that cowboys live on ranches instead of farms. A kinescope recording of the award-winning University of Wisconsin television series.
- Hare and the Tortoise*, 10 minutes, black and white, Encyclopedia Britannica Films. Excellent true-life dramatization of the old folk-tale race.
- Homes Around the World*, 16 minutes, black and white, United World Films. A social contact with the kinds of homes found all over the world.
- Let's All Sing Together*, Nos. 1-6, 9 minutes each, black and white, Library Films. Animated cartoons and bouncing balls bring direct participation in group singing.
- Little Gray Neck*, 20 minutes, black and white, Fleetwood. A fantasy of animated animals.

- Loon's Necklace*, 10 minutes, color, Encyclopedia Britannica Films. The legend of how the loon received the white ring of feathers around its neck. The story is told through photography of Indian masks.
- The Magic Fish*, 15 minutes, black and white, Sterling Films. A film rendition of the folk tale about the poor fisherman who caught a magic fish that could grant wishes.
- Music for Young People*, 22 minutes, Indiana University Audiovisual Center. Introduces children to the trumpet, trombone, French horn, and tuba.
- The Night Before Christmas*, 11 minutes, color or black and white, Encyclopedia Britannica Film. Visualizes Clement Moore's Christmas poem using a setting of the period in which the story-verse was written.
- Our Country's Flag*, 11 minutes, color, Coronet. Explains the meaning of flags, what our flag represents, and the ideas expressed in the Pledge of Allegiance.
- Our Country's Song*, 11 minutes, black and white, Coronet. Children who watch this film will discover the meaning of "The Star-Spangled Banner"—and will not go home as did one primary girl and sing for mother "The Star Mangled Banner."
- Our World of Science*, 11 minutes, black and white, Encyclopedia Britannica Films. The orderly universe is presented to children in a manner which encourages a scientific attitude and a problem-solving approach to everyday events.
- The Owl and the Pussycat*, 6 minutes, color, Sterling Films. With the ring obtained from the pig, the owl and the pussycat are wed in this colorful filming of the nonsense verse.
- Pacific 231*, 10 minutes, black and white, Young America Films. A blend of Arthur Honegger's symphonic music and the sounds of a locomotive. A fascinating film experience that brings depth to sound and visual flashes.
- Punch and Judy*, 18 minutes, color, Gateway Films. The classical form of a Punch and Judy show.
- Red Carpet*, 9 minutes, color, Weston Woods. The iconographic method of taking motion pictures to illustrate the book by the same title.
- Rhythm and Percussion*, "Children's Concert," 10 minutes, black and white, Encyclopedia Britannica Films. The fundamentals of rhythm presented with tom-toms and modern drums.
- Sea Adventures of Sandy Snail*, 16 minutes, color, Encyclopedia Britannica Films. Finger painting and storytelling replace the chalk talk of yesterday.
- Silent Night: Story of the Christmas Carol*, 14 minutes, black and white, Coronet. The story behind the song that is sung all over the world every year.
- Song of the Prairie*, 19 minutes, color, Contemporary Films. A most hilarious satire on the great American Western theme. A perfect blend with the book *The Saga of Stewy Stinker* by Virginia Lee Burton.
- Spotty the Fawn*, 10 minutes, black and white, Coronet. A nature-study

approach to the story of a fawn. Many good close-up views of the fawn, blue jay, chipmunk, and skunk.

The Steadfast Tin Soldier, 14 minutes, color, Brandon. Moving dolls illustrate the Hans Christian Andersen tale.

The Story of Our Number System, 11 minutes, black and white, Coronet. Traces the historical development of numbers, including the counting systems and the making of the abacus.

Tara, the Stonecutter, 7 minutes, color, International Film Bureau. A Japanese folk tale told through animation in the Oriental art style.

Three Fox Fables, 11 minutes, black and white, Encyclopedia Britannica Films. Aesop's fables have never been captured in more beautiful and realistic settings. Through direct photography of real animals, the stories "The Fox and the Grapes," "The Fox and the Crow," and "The Fox and the Stork" are told.

Three Little Bruins on a Spree, 9 minutes, black and white, Castle. No one tires of seeing bear cubs get into mischief. A delightfully humorous film of a cub's world.

Thumbelina, 10 minutes, Contemporary Films. Silhouettes dramatize the classic story of the wee little lady.

Tipi-How, 11 minutes, color, Teton Films. The actual making of large tipis (tepees).

Tippy the Town Dog, 10 minutes, color, Encyclopedia Britannica Films. The everyday routine of caring for a dog in the city and the adventures that take place in finding the dog when it runs away from home.

Torn Paper, 5 minutes, color, Bailey Films. Demonstrates the use of torn paper forms in creating designs and pictures. Stimulates individual activity.

Trip to the Sky, 11 minutes, black and white, Gutlohn Films. Imaginary trip to the sky and visits to relief models of Mars, the moon, and Saturn.

Your Family, 10 minutes, black and white, Coronet. The family portrayed in unit operation.

Testing Materials

A. Source Publications

ABILITY TESTS

General

- Hildreth, Gertrude H., *et al.*, *Metropolitan Achievement Test, Grades 1, 2, 3-4*, Yonkers-on-Hudson, World Book, 1959.
- Tiegs, Ernest W., *et al.*, *California Achievement Tests, Grades 1-2, 3-4.5*, Los Angeles, California Test Bureau, 1958.
- Young, Robert V., *et al.*, *American School Achievement Tests, Grades 1, 2-3*, Bloomington, Illinois, Public School Publishing Co., 1955.

Special

- Brueckner, Leo J., *Co-ordinated Scale of Attainment, Battery 1, Grade 1* (Arithmetic Experience—Ages 5½ to 6½), Minneapolis, Educational Test Bureau, 1947.
- Gates, Arthur I., *Gates Reading Diagnostic Tests, Grades 1-8*, rev. ed., New York, Columbia University, Teachers College, Bureau of Publications, 1953.
- Harrison, M. Lucile, and James B. Stroud, *Harrison-Stroud Reading Readiness Tests*, Boston, Houghton Mifflin, 1956.
- Hildreth, Gertrude H., and N. L. Griffiths, *Metropolitan Readiness Tests*, Yonkers-on-Hudson, World Book, 1950.
- Lee, J. M., and W. W. Clark, *Lee-Clark Reading Readiness Tests*, rev., Los Angeles, California Test Bureau, 1951.
- Teigs, Ernest, and W. E. Clark, *California Arithmetic Test*, Los Angeles, California Test Bureau, 1957.
- Templin, Mildred, "Screening Test Word List for Checking Speech Sounds and Cut-off Score on Screening Tests for Ages Three Through Eight," *Journal of Pediatrics*, October, 1954, p. 444.

CAPACITY TESTS

- Brown, Andrew W., *et al.*, *Chicago Non-Verbal Examination, Ages 6 and Over*, New York, Psychological Corporation, 1947.
- Goodenough, Florence L., *Goodenough Intelligence Test, Grades Kindergarten-3*, Yonkers-on-Hudson, World Book, 1926.
- Mellone, Margaret A., *et al.*, *Moray House Picture Intelligence Test I*, London, University of London Press, 1958.
- Pintner, Rudolf, and Bess Cunningham, *Pintner-Cunningham Primary Mental Tests*, Yonkers-on-Hudson, World Book, 1923.
- Sullivan, Elizabeth, *et al.*, *California Test of Mental Maturity and Adaptations*, Los Angeles, California Test Bureau, 1951.
- Thurstone, L. L., *Test of Primary Mental Abilities for Ages 5-7*, Chicago, Science Research Associates, 1947.
- Valentine, E. W., *Intelligence Tests for Children*, 4th ed., London, Methuen, 1950.
- Wechsler, David, *Wechsler Intelligence Scale for Children*, New York, Psychological Corporation, 1949.

APTITUDE TESTS

- Bellak, Leopold, and Sonya S. Bellak, *Children's Apperception Test, Ages 3-10*, rev. ed., New York, C.P.S. Co., 1955.
- Moore, Josephy E., *et al.*, *Moore Eye-Hand Coordination and Color Matching Tests, Ages 2 and Over*, Los Angeles, California Test Bureau, 1955.

CONDUCT TESTS

- Doll, E. A., *Vineland Social Maturity Scale*, Minneapolis, Educational Test Bureau, 1947.

B. Story Pretest

Title page

1

SAM AND SAL

Number Book

Sam and Sal were twins.
 This was a surprise to their parents,
 Who had expected only *one*
 baby . . .
 And instead got *two*!

(Picture of twins in a bassinet)

Name _____

Grade _____

2

Soon Sam and Sal had a birthday.
They were 1 . . . and had *one*
candle on their cake.
Another year passed and they were
2 . . . and had *two* candles!
(Picture of two birthday cakes,
one with one candle and the
other with two)

3

Sam and Sal grew and grew until
they were almost as tall as you!
"Good gracious me," their mother
said one day as she watched
them play,
"I can hardly believe that tomor-
row they'll be 3!"
(Picture of Sam and Sal play-
ing with blocks on the floor in
front of a door which has eight
squares in its paneling)

4

And after that birthdays just
seemed to roll around . . .
First came 4 and then came 5.
And they could go to school!
(Picture of Sam and Sal, hands
in their pockets, on their way
to school; school building
in the background)

5

But look! Sam and Sal need some-
thing to use at school.
They have no fingers or hands. . . .
You draw them on, and hurry so
they won't be late.
Girls draw Sal's and boys draw
Sam's.
(Picture of twins large enough
for children to draw hands and
fingers on their outstretched
arms; one of Sam's feet is hid-
den behind one of Sal's)

6

Oh, dear, oh, dear. Sam forgot
something else too!
Color the thing poor Sam forgot.
What is it? It's something that
rhymes with *two*.
(Pictures of a roller skate, a
bee, a shoe, a coin with 10¢
written on it, the sun, and a
flower)

7

Dad had told Sam to put on every-
thing when he dressed for school.
Mother told Sal to put her boots on
first, her coat on second, and
third to wear her hat.
(Picture of Dad and Mother)
Color the parent that told the twins
in a way that's easier to remem-
ber.

8

And so it was that Sam and Sal grew some more. . . .

"Another birthday," cried Mother, "how can it be? It seems only yesterday they were 5!"

But it was true. Another birthday cake. How many candles on this cake? Draw the right number to tell how old Sam and Sal are now.

(Picture of birthday cake without candles)

9

After school Sal baked two gingerbread men.

She needed a cup of flour.

Color the cup Sal should use to measure the flour.

(Picture of Sal, a table with a canister which is marked FLOUR, a measuring cup with markings for $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, and 1 cup, and a regular coffee cup)

10

Sal baked one gingerbread man for Sam and one for herself.

Sam said, "Thank you," but he was so anxious to bite into it that he broke the arms off!

Can you find the missing arms?

Color the right arm *red* and the left arm *blue*.

(Picture of armless gingerbread man with four arms, two left and two right, one set will match the body, the other will be distinctly different)

11

This is a game Sam and Sal like to play.

It's called, "Follow the dots and what do you see?"

(Numbered dots to make picture of tree)

If you can count, it should be a tree! (Ordinal tally dots arranged to make a picture of a Christmas tree)

12

"Can you read numbers?" Dad asked the twins.

Sal said, "Yes."

Sam said, "No."

"Well," said Dad, "You should know what follows 1-2-3 . . . so try this."

		1		
11	12		2	3
	10		4	
9	8		6	5
		7		

13

Can you find page 3 in this book?

When you find it, color three squares on the thing whose name sounds like *four*.

On page 9 color Sal's dress yellow.

14

On this birthday cake draw the candles that will show the twins have turned 8.

(Picture of birthday cake without candles)

How many more did you need now than you did when the twins were 6? Color the number of candles you needed.

(Picture of a box containing six candles)

15

Telephone Sam and Sal.

Their number is 56049.

After you have said "Happy birthday" to them, listen to what they have to tell you.

While you're listening, color their telephone number on this telephone dial.

(Picture of telephone with a numbered dial)

Then copy the twins' number on this line so you won't forget it.

Sam and Sal _____

Field Application: Information Forms

A. Activity and Judgment Check List for Teacher

The following list of activities and judgments are those that are commonly experienced in the primary grades. Check each in the manner that best describes your knowledge of it: 1 No experience; 2 Experience; 3 Confident knowledge.

ROUTINE SCHOOL PROCEDURES

- | | |
|--|---|
| ☐ Roll call | ☐ Recess |
| ☐ Tell time | ☐ Milk or juice period |
| ☐ Nap time | ☐ Lavatory |
| ☐ Liberty play activities | ☐ School bus schedule |

SPECIAL ACTIVITIES

- | | |
|--|--|
| ☐ First two weeks of the year | ☐ Accidents or other emergencies |
| ☐ Birthday celebrations | ☐ Organization and leading of field trips |
| ☐ Holiday celebrations | ☐ School programs and projects |
| ☐ Parents' visiting days | |
| ☐ Fire drill procedure | |

SCHOOL AND PARENTS

- | | |
|---|---|
| ☐ Report cards | ☐ Cooperation with room mothers |
| ☐ Conferences with parents | ☐ School policies |
| ☐ Notes to parents | ☐ Parents' clubs |
| ☐ PTA involvement | ☐ Professional organizations |
| ☐ Handling health records | ☐ Activities of the school board |
| ☐ School record keeping | ☐ Knowledge of city-wide school philosophies |
| ☐ Cumulative files | |

RESOURCE KNOWLEDGE

- | | |
|--|-------------------------------------|
| _____ Use of reference books | _____ Evaluation of textbooks |
| _____ Ability to locate professional books | _____ Selection of needed equipment |
| _____ Knowledge of professional journals and magazines | |

CURRICULUM

- | | |
|--|--|
| _____ Use of curriculum guides | _____ Knowledge of curriculum patterns |
| _____ Knowledge of state curriculum guides | _____ Selection of worthy units |

LESSON PLANS

- | | |
|----------------------------|---------------------------------------|
| _____ Lesson plans by day | _____ Lesson plans by unit |
| _____ Lesson plans by week | _____ Lesson plans by the school year |

TEACHER ACTIVITIES

- | | |
|-------------------------------|--|
| _____ Paper grading | _____ Lettering |
| _____ Work sheet construction | _____ Bulletin board construction |
| _____ Flannel board objects | _____ Operation of audiovisual equipment |
| _____ Free-hand drawing | |

DEVELOPMENT OF PERSONAL PHILOSOPHY

- | | |
|-------------------------|------------------|
| _____ Educational goals | _____ Evaluation |
| _____ Discipline | |

CURRICULUM AREAS

Reading

- _____ Reading readiness activities
- _____ Auditory discrimination of words
- _____ Visual discrimination of words
- _____ Sight words
- _____ Identification of reading skills
- _____ Word lists
- _____ Experience charts
- _____ Sequence charts

Drama and Language Arts

- _____ Telling stories
- _____ Dramatizations
- _____ Finger play
- _____ Sociodramas
- _____ Hand puppetry
- _____ String puppetry
- _____ Choral reading

Spelling and Writing

- _____ Manuscript writing
- _____ Cursive writing
- _____ Chalkboard writing
- _____ Handwriting scales
- _____ Knowledge of methods of teaching handwriting
- _____ Spelling lists
- _____ Letter writing

Literature

- _____ Library visiting
- _____ Selection of quality literature
- _____ Reading stories
- _____ Reading poetry
- _____ Use of Mother Goose rhymes

CURRICULUM AREAS

Speech

- _____ Ability to understand pupils' speech dialects
- _____ Auditory discrimination games
- _____ Tongue twisters

Science

- _____ Knowledge of scientific references
- _____ Care of pets in school
- _____ Care of terrarium, herbarium, and aquarium

Numbers

- _____ Number readiness activities
- _____ Calendar instruction
- _____ Telling time instruction
- _____ Number systems
- _____ Counting rhymes

Art

- _____ Interpretation of children's drawings
- _____ Knowledge of mixing tempera paint
- _____ Paper sculpture
- _____ Finger painting
- _____ Clay modeling
 - _____ Slab method
 - _____ Pinch method
 - _____ Coil method

Color

- _____ Knowledge
- _____ Activities

Games

- _____ Outdoor games
- _____ Educational games
- _____ Relaxing games
- _____ Active games
- _____ Indoor games

Music

- _____ Teaching rote singing
- _____ Playing the piano
- _____ Playing another instrument
- _____ Singing on key
- _____ Selection of musical records
- _____ Balance of musical curriculum
- _____ Repertory of songs
- _____ Skill knowledge of rhythm

Science

- _____ Use of scientific equipment
- _____ Knowledge of scientific experiments

MANUAL SKILLS

- | | |
|--------------------------------------|---|
| _____ Ability to make materials | _____ String painting |
| _____ Homemade paste | _____ Sponge painting |
| _____ Finger paint | _____ Block printing (potato and other types) |
| _____ Sawdust and paste for modeling | _____ Etching |
| _____ Papier mâché | _____ Fade pictures |
| _____ Various uses of chalk | _____ Blot painting |
| _____ Collages | _____ Paint over crayon |
| _____ Mosaics | _____ Mobiles |
| _____ Instruction in use of scissors | _____ Scribble pictures |
| _____ Paper tearing | _____ Masks |
| _____ Simple woodworking | _____ Costumes |
| _____ Mural painting | _____ Soap bubbling |
| _____ Splatter painting | _____ Water play |

B. Family Information Form

Child _____

LAST NAME	FIRST NAME	MIDDLE NAME
		HOME NAME
		NICKNAME

Sex _____ Date of birth _____ Place of birth _____

Address _____

Telephone number _____

Father's business address _____ Telephone _____

Mother's business address _____ Telephone _____

Father and mother living together? _____

If not, who has legal jurisdiction over the child? (Give address if different from that given above.) _____

Siblings (List below.) _____

Name	Age	Sex
------	-----	-----

Members of the household other than parents and children named (list below)

Name	Approximate Age	Sex	Number of Years Residence
------	-----------------	-----	------------------------------

Information given by _____

Date _____

C. Inventory of Child's Experience

Dear Parents:

The questions on this inventory form ask you to give reflective thought to the type and range of experiences your child enjoyed under your direction. Please omit any question which you feel is unimportant or which you feel you are unable to answer. The school wishes only to learn the type and range of activities that the home has provided the children so that it may better deepen and extend the instruction it has to offer.

How many children's books, other than books from libraries, are available to the child at home?

____ 0-5
 ____ 6-15
 ____ 16-30

____ 31-50
 ____ Over 50

In the two years before the child entered public school, how often did either of the parents read to him?

____ Never
 ____ 2-5 times a year
 ____ 6-10 times a year

____ 1-3 times a month
 ____ 1-3 times a week or oftener

How often does either parent participate in games, either indoor or outdoor, with the child?

____ Never
 ____ 1-10 times a year

____ 1-2 times a week
 ____ Almost daily

How many children's phonograph records are in the home?

____ None
 ____ 1-3
 ____ 4-6

____ 7-10
 ____ More than 10

Approximately how many hours per week does the child listen attentively to the radio or television?

____ None
 ____ 1-2
 ____ 3-4

____ 5-6
 ____ More than 6

Has the child ever visited a museum or art gallery?

____ Never
 ____ Once
 ____ 2-3 times

____ 4-5 times
 ____ More than 5 times

Has the child ever visited a zoo or circus?

____ Never
 ____ Once
 ____ 2-3 times

____ 4-5 times
 ____ More than 5 times

Has the child ever been in a city larger than the largest city in your state?

____ Never
 ____ Once
 ____ 2-3 times

____ 4-5 times
 ____ More than 5 times

Has the child ever visited on a farm to the extent that he spent several continuous hours there?

____ Never
 ____ Once
 ____ 2-3 times

____ 4-5 times
 ____ More than 5 times

How often has the child attended religious services or school in the past year?

____ Never
 ____ 1-3 times a year
 ____ 3-10 times a year

____ 1-2 times a month
 ____ Weekly

Has the child ever gone to nursery school?

____ Never
 ____ 1 semester

____ 1 year
 ____ 2 or more years

Has the child visited in the homes of his playmates without his parents?

____ Never
 ____ 1-3 times
 ____ 3-6 times

____ 6-10 times
 ____ More than 10 times

Has the child visited in the homes of his relatives or friends of his parents in other cities?

____ Never
 ____ 1-2 times
 ____ 3-4 times

____ 5-6 times
 ____ More than 6 times

How much time has the child spent on vacation with the rest of the family during the past two years?

____ None
 ____ 1-3 days
 ____ 4-10 days

____ 11-12 days
 ____ More than 21 days

Has the child ever stayed overnight in a hotel, motel, or pullman berth?

____ No

____ Yes

How often does the child attend movies?

____ Never
 ____ Less than once a month
 ____ About once a month

____ About once a week
 ____ More than once a week

Has the child been in a hospital or clinic? (Count instances when he was a visitor as well as a patient, but not instances in which he only ventured into the waiting room.)

____ Never
 ____ Once
 ____ Twice

____ 3 times
 ____ More than 3 times

How often has the child been attended in any way by a doctor in the last year?

- | | |
|--------------------------------|--|
| ☐ Never | ☐ 3-5 times |
| ☐ Once | ☐ More than 5 times |
| ☐ Twice | |

Has the child ever traveled by train?

- | | |
|------------------------------------|--|
| ☐ Never | ☐ 4-5 times |
| ☐ Once | ☐ More than 5 times |
| ☐ 2-3 times | |

Has the child ever flown in a plane?

- | | |
|------------------------------------|--|
| ☐ Never | ☐ 4-5 times |
| ☐ Once | ☐ More than 5 times |
| ☐ 2-3 times | |

How far would you estimate that your child has traveled in the past year (not counting short trips of less than 10 miles)?

- | | |
|--|---|
| ☐ Less than 100 miles | ☐ 1500-4000 miles |
| ☐ 100-500 miles | ☐ More than 4000 miles |
| ☐ 500-1500 miles | |

How many times has the child attended a concert or dramatic production accompanied by an adult?

- | | |
|-------------------------------|--------------------------------------|
| ☐ None | ☐ 5-6 |
| ☐ 1-2 | ☐ More than 6 |
| ☐ 3-4 | |

How many times has the child witnessed an organized contest?

- | | |
|-------------------------------|---------------------------------------|
| ☐ None | ☐ 7-12 |
| ☐ 1-3 | ☐ More than 12 |
| ☐ 4-6 | |

Before entering the primary school, approximately how far could the child count?

- | | |
|-----------------------------------|-------------------------------------|
| ☐ Up to 3 | ☐ Up to 100 |
| ☐ Up to 10 | ☐ Beyond 100 |
| ☐ Up to 20 | |

How many times has the child gone on a hike or a camping trip into the forest or fields where he could observe wild animals and plants in their natural state?

- | | |
|------------------------------------|---|
| ☐ None | ☐ 7-15 times |
| ☐ 1-2 | ☐ More than 15 times |
| ☐ 3-6 times | |

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How many times during the last year has your child been in a large department store?

- | | |
|--------------------------------|---------------------------------------|
| ☐ 1-5 | ☐ 21-30 |
| ☐ 6-10 | ☐ More than 30 |
| ☐ 11-20 | |

Approximately how many children's parties has the child attended either in his own home or elsewhere?

- | | |
|-------------------------------|--------------------------------------|
| ☐ None | ☐ 4-5 |
| ☐ 1 | ☐ More than 5 |
| ☐ 2-3 | |

How often does the child actually help his mother or father in the performance of some chore?

- | | |
|--|---|
| ☐ Never | ☐ 1-3 times a week |
| ☐ 1-10 times a year | ☐ Almost every day |
| ☐ 1-3 times a month | |

How many definite responsibilities does the child have in the home which he is expected to perform with some sort of periodic regularity (such as setting out milk bottles, emptying waste baskets)?

- | | |
|-------------------------------|--------------------------------------|
| ☐ None | ☐ 3 |
| ☐ 1 | ☐ More than 3 |
| ☐ 2 | |

Does the child operate the telephone, at least to answer it when it rings, without adult assistance?

- | | |
|------------------------------|-----------------------------|
| ☐ Yes | ☐ No |
|------------------------------|-----------------------------|

Does your child know his first and last name?

- | | |
|------------------------------|-----------------------------|
| ☐ Yes | ☐ No |
|------------------------------|-----------------------------|

Does your child take daytime naps or rest periods?

- | | |
|------------------------------|--------------------------|
| ☐ Yes | If so, time of day _____ |
| ☐ No | |

How much time does the child spend on playgrounds provided with facilities for child play (not including play immediately before and after school or at recess)?

- | | |
|--|---|
| ☐ None | ☐ 2-8 hours a week |
| ☐ 1-12 hours a year | ☐ Most of his free time during summer vacation |
| ☐ 1-6 hours a month | |

Has the child worked in a garden?

- ☐ Never
☐ 1-2 times
☐ 3-6 times
☐ Several times during two or more years

- ☐ Followed a garden project throughout the growing season

In answering the following questions, please provide more than one answer whenever appropriate.

Had the child worked with art materials in the home before he entered public school?

- ☐ Pencil and paper
☐ Crayons
☐ Water colors

- ☐ Scissors and paste
☐ Clay or other plastic material

Has the child ever been placed in charge of a younger child?

- ☐ During a play period?
☐ As a baby-sitter?

- ☐ On a trip to the store?
☐ To feed the younger child?

Has the child ever "worked" around the house, yard, or garage with simple tools?

- ☐ Saw
☐ Hammer

- ☐ Jackknife or hunting knife
☐ Screw driver

Which of these things has the child learned to do without being reminded of them by his parents?

- ☐ Brush his teeth
☐ Hang up his clothes

- ☐ Put his toys away
☐ Wash his hands before eating

Has the child consistently taken care of any of these pets for a month or more?

- ☐ Dog
☐ Cat
☐ Rabbit

- ☐ Goldfish or turtle
☐ Pigeon, canary, or other bird
 Other _____

The term the child uses when he wishes to go to the bathroom is:

Has the child heard any language other than English in his home for a year or more?

- ☐ French
☐ German
☐ Russian

- ☐ Spanish
☐ Other

Has your child been interested in any type of leisure time activity for over a month? Please describe types if possible.

Has your child any slang or pet phrases which have become part of his daily language habits? Please list such phrases if possible.

D. Physical Status Card

Name _____

LAST NAME

FIRST NAME

MIDDLE NAME

Date of birth _____ Sex _____

MONTH

DAY

YEAR

Address _____ Telephone _____

Business telephones

Father _____ Mother _____ Legal guardian _____

Name _____

Disease History	Date	Immunizations, X-rays, tests	Date	General information
_____ Chicken Pox		_____ Diphtheria		_____ Speech defect
_____ Measles		_____ Whooping		_____ Eating habits
_____ Type		_____ cough		_____ Disturbed
_____ Mumps		_____ Tetanus		_____ sleep
_____ One or		_____ Booster		_____ Bed-wetting
both sides		_____ Small Pox		_____ Temper
_____ Scarlet fever		_____ Salk (1-2-3-4)		_____ tantrums
_____ Impetigo		_____ Tuberculosis		_____ Stomach
_____ Polio		(skin test)		_____ disorders
_____ Rheumatic Fever		_____ Chest X-rays		_____ Joint pains
_____ Allergies		_____ Other		_____ Nervous
_____ Pneumonia				_____ symptoms
				_____ Play habits

Additional information:

Name of doctor _____ Telephone _____

Name of dentist _____ Telephone _____

Choice of hospital _____

E. Exceptional Trait Record

Name of Child _____ Date _____

Dear Parents:

In this form we offer you the opportunity to state the traits and characteristics in your child which in your opinion make him different from any other child. We believe that every child is a unique individual, and we feel that information of this type at the time of the initial school experience will help the school to train and educate your child in being an individual. Uniformity is not the aim of our educational program. Please complete this form, and do not be concerned if your judgment changes throughout his development. Space is provided for you to list points in which you believe your child to differ from other children. These differences may be in abilities, mentality, physical characteristics, emotions, and behavior. A list of characteristics is given if you care to identify the strengths by such terms.

STRENGTHS

(Check all those that you feel your child exhibits)

- | | |
|---|--|
| ☐ Vocabulary | ☐ Possessing few fears |
| ☐ Interest in music | ☐ Avid curiosity |
| ☐ Interest in mechanical objects | ☐ Ease in making friends |
| ☐ Interest in books | ☐ Enjoyment of all kinds of foods |
| ☐ Interest in records | ☐ Interest in tools |
| ☐ Ability to laugh | ☐ Interest in dance |
| ☐ Interest in the care of pets | ☐ Interest in helping others |
| ☐ Interest in sports | ☐ Interest in clothes |
| ☐ Interest in games | ☐ Physical attractiveness |
| ☐ Interest in puzzles | ☐ Patience |
| ☐ Unselfishness | ☐ Adjustability and flexibility |
| ☐ Ease in expressing wishes | |

Additional space is provided for you to list traits which you would like the school to recognize as those which make your child an individual.

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